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INDEX.

PAGE

Abdominal incision, method of closing ... 238
Abscess, multiple, amputation of breast for ... 250
Abscesses, cerebral, of otitic origin, the diagnosis of ... 378
Acetylene as an illuminant ... 288
Acne pustulosa, new and successful treatment of ... 125
Adenoid growths in children ... 47
Air, expired, composition of, and its effects upon animal life ... 350
Albumin in urine, a domestic test for ... 286
Albumin testing, technique of .. 48
Albuminuria, cantharides in ... 26
Alcoholism in Stockholm ... 96
Ambition, my ... 71
Amputation at the hip by the Wyeth method ... 270
Anderson, Dr. T. Method of Closing Abdominal Incision .. 238
Anæsthesia for plastic operations about the eye, practical points in ... 191
Anæsthetic, a general, the management of accidents during administration of ... 40
Aneurism, latent, of the aorta, a new and distinguishing sign of ... 349
Aneurism of the arch of the aorta, rhythmic nodding of the head in ... 377
Anthrax ... 331
Antitoxin treatment as a cure of diphtheria ... 380
Apoplexy, pons, symptoms of .. 314
Appendicitis, indications for surgical interference in cases of. 349
Appendicitis: Report of six cases ... 71
Asafetida in obstetrics ... 253
Ascites, senecio aureus in ... 318
Asthma, treatment of by a strict milk diet ... 159

PAGE

Astringent, the new ... 222
Auditory canal, bony growth of the ... 365
Author, editor and critic: the Homœopathic text-book of surgery ... 141
Auto-disinfection: A new antiseptic ... 286

Bane, Dr. W. C. Inflammation of the Middle Ear With Involvement of the Mastoid ... 100
Bath, benefits of the ... 210
Bathe, when and how to ... 255
Bellevue Hospital Medical College and the Commissioners of Charities ... 144
Bibliographical:
  A Homœopathic Text-Book of surgery ... 119
  American Medical Review ... 25
  Annual of the Universal Medical Sciences ... 24
  A Pictorial Atlas of Skin Diseases and Syphilitic Affections ... 86
  A Treatise on Surgery ... 342, 372
  Bartholow, Roberts, A Practical Treatise on Materia Medica and Therapeutics .. 343
  Boislinière, L. C. H. Obstetric Accidents, Emergencies and Operations ... 183
  Bosworth, Francke Huntington. A Text-Book of Diseases of the Nose and Throat ... 342
  Bowditch, Henry P.; John G. Curtis; Henry H. Donaldson; W. H. Howell; Frederick S. Lee; Warren P. Lombard; Graham Lusk; W. T. Porter; Edward T. Reichert and Henry Sewall. The American Text Book of Physiology ... 372
  Boyle, Chas. C. Therapeutics of the Eye ... 24
  Brothers, A. Infantile Mortality During Child Birth and Its Prevention ... 144
  Brown, Lennox. Diphtheria and Its Associates ... 24
  Buck, Albert H. Vest-Pocket Medical Dictionary ... 344
  Buffum, J H. Manual of the Essentials of the Eye and Ear ... 24
  Burnett, Charles H.; Phineas S. Connor, William W. Keene, Charles B. Nancredi, Roswell Park, Frederick S. Dennis, Lewis S. Pilcher, Nicholas Senn, F. I. Shepherd, Lewis A. Stimson, William Thompson, J. Collins Warren, and William White. An American Text Book of Surgery for Practitioners and Students ... 55
  Butler, George Frank. A Text Book of Materia Medica ... 372
  Chapman, Henry C. A Manual of Medical Jurisprudence and Toxicology ... 86
  Claiborne, J. Herbert. The Functional Examination of the Eye ... 540
  Clarkson, Arthur. A Text Book of Histology ... 342
  Corwin, Arthur M. Essentials of Physical Diagnosis of the Thorax ... 371
  Davis, Edward P. A Treatise on Obstetrics ... 310, 371
  Deaver, John B. A Treatise on Appendicitis ... 271
  De Schweinitz. G. E. Diseases of the Eye ... 343
  Diet for the Sick ... 371
  Diets for Infants and Children in Health and in Disease ... 144

PAGE
Eleventh Annual Report of the New York Post-Graduate Hospital.............. 54
Eleventh Annual Report of the Westboro Insane Asylum.. 24
Fuller, Eugene. Disorders of the Male Sexual Organs... 183
Goodno, William C. The Practice of Medicine...... 25
Grandin, Egbert H. Pregnancy, Labor and the Puerperal State.............. 24
Grant, S. G. Diagnosis and Treatment of Diseases of the Rectum, Anus and Contiguous Textures.......... 144
Gray's Anatomy.......... 271, 371
Haab, D. An Atlas of Ophthalmology.............. 54
Hare, Hobart Amory. Practical Diagnosis............ 310
Hayden, James R. A Manual of Venereal Diseases....... 343
Helferich, H. Atlas of Traumatic Fractures and Luxations, with a Brief Treatise. 119
Holbrook, M. L. Physical, Intellectual and Moral Advantages of Chastity....... 24
Houston, Edward J., and A. E. Kennelly. Electricity in Electro-Therapeutics...... 119
How to Feed Children 216
Hurndall, John Sutcliffe. Veterinary Homœopathy in Its Application to the Horse.. 310
Hyde, James Nevin, and Frank H. Montgomery. A Manual of Syphilis and the Venereal Diseases.................. 24
Ingraham, Charles Wilson. Don'ts for Consumptives.. 119
Jacobi, A. Therapeutics of Infancy and Childhood.... 54
Jacobi, C. Medical Hand Atlas of Nervous Diseases.. 86
Jennings, J. Ellis. Color Vision and Color Blindness. 87
King, John H. Medical Prescriptions................ 54
King, William Harvey. Treatise on Spermatorrhœa, Impotence and Sterility...... 311
Kingzett, C. T. How to Disinfect.................. 24
Knerr, Calvin B. A Repertory of Hering's Guiding Symptoms of the Materia Medica. 144
Lockwood, George Roe. A Manual of the Practice of Medicine................ 54
Lovering, Anna Temple. Hints in Domestic Practice and Home Nursing........... 24
Lydston, G. Frank. Over the Hookah; The Tales of a Talkative Doctor........ 372
Mariani, Angelo. Coca and Its Therapeutic Applications.................... 146
McFarland, Joseph. A Text-Book Upon the Pathogenic Bacteria................ 119
Moullin, C. W. Mansell. Surgery..................... 55
Murrell, William. A Manual of Pharmacology and Therapeutics.................. 343

PAGE
Musser, John H. A Practical Treatise on Medical Diagnosis..................... 343
Osler, William. The Principles and Practice of Medicine..................... 25
Pease, Chas. G. Hints and Suggestions as Aids in the Care and Preservation of the Teeth, and the Relation of the Dental Organs to Our Health.............. 54
Pictorial Atlas of Skin Diseases and Syphilitic Affections..................... 120
Present Status of Pediatrics 244
Purdy, Charles W. Practical Urinalysis and Urinary Diagnosis..................... 25
Ransome, Arthur. The Treatment of Phthisis.......... 183
Rockwell, A. D. The Medical and Surgical Uses of Electricity.................... 342
Rowland, Sidney. Archives of Clinical Skiagraphy.... 342
Schaeffer, Oscar. Anatomical Atlas of Obstetrical Diagnosis and Treatment....... 371
Senn, N. The Principles of Surgery................. 87
Shoemaker, John V. Materia Medica and Therapeutics.. 55
Simon, Charles E. A Manual of Clinical Diagnosis by Microscopical and Chemical Methods.......... 211, 310
Sternberg, George M. A Text-Book of Bacteriology. 216
Storey, Emily A. M. Practical Points in Nursing..... 343
The American Year-Book of Medicine and Surgery...55, 244
The International Encyclopædia ot Surgery......... 25
The International Medical Annual and Practitioner's Index..................25, 144
The Pocket Record Sheet... 55
The Three Ethical Codes.... 216
The Year-Book of Treatment for 1896................. 87
Twentieth Century Practice of Medicine....87, 183, 271, 372
Vaughan, Victor C. Ptomains, Leucomains, Toxines and Antitoxines, or the Chemical Factors in the Causation of Disease...... 343
Watkins, Lyman. An Eclectic Compendium of the Practice of Medicine.......... 86
Weir's Index to the Medical Press................... 119
Wharton, Henry H. Minor Surgery and Bandaging.... 342
Wilson, J. C. An American Text Book of Applied Therapeutics............. 310
Wood, Horatio C., and Reginald H. Fitz. The Practice of Medicine.......... 371
Yeo, I. Burney. Food in Health and Disease....... 343
Bladder difficulties, chimiphila in........................ 254
Bladder, foreign body in the, suprapubic cystotomy for.... 251

PAGE
Blood, ox, external and internal use of...................... 42
Blood stains, removal of. 287
Bloom, Dr. I. N. Hemorrhage Following Dilatation of Urethral Stricture: Physical Non-Development at Twenty-three: Report of Anomalous Cases.. 261
Boil on end of nose, raw cranberry for................ 251
Boston letter, our............. 21
Brain Association, the Cornell.. 189
Bright's disease, milk in the treatment of............. .. 319
BRODNAX, DR. B. H. "Male and Female."............... 26
BRODNAX, DR. B. H. Some Dual Properties in Medicine. 236
Bronchitis, chronic, stibium arsenicosum in............... 253
Burns, antiseptic treatment of.. 265
Burns, aristol for.............. 337
Burns, hamamelis for.......... 317
BUSH, DR. I. J. Chronic Posterior Urethritis............ 362
Butter, bacteriology of......... 319
Butter making machine, a new. 256

Cancer and high feeding....... 338
Cancer and tuberculosis........ 224
Cancer, contagion of.......... 112
Cancer of the uterus, calcium carbide in the treatment of... 282
Cancer, primary, of the trachea, diagnosis of................ 377
Cancer, treatment of, by injection of alcohol............ 31
Cantharides in nephritis........ 57
Carbonic acid, influence of on the sexual organs........... 318
Carcinoma, the alcoholic treatment of.................... 337
Cardiac murmurs............. 382
Cardiac murmurs, inorganic, in children.................... 287
CARLETON, DR. B. G. A Study of Some Drugs in So-called Derangement of Sexual Function........................ 12
CARLETON, DR. B. G. Metropolitan Hospital, Blackwell's Island; Genito-Urinary Ward. 302
CARLETON, DR. B. G. New Instruments: Urethral Dilators. 47
CARLETON, DR. B. G. Prostatic Enlargement, or Hypertrophy; Its Cause, Prevention and Treatment, Remedial and Surgical 193
CARLETON, DR. E. Dr. Carleton and His State Society ... 143
CARMICHAEL, DR. J. A. An Anatomical Theory of Society.....................176, 205
CARMICHAEL, DR. J. A. City and Country Doctors........ 313
CARMICHAEL, DR. J. A. Diseases of the Intellectual Faculties and Certain Forms of Insanity, Caused by Congenital Deformities of the Genito-Urinary Organs in Both Sexes. 234
CARMICHAEL, DR. J. A. Fantastic Prescriptions.......... 57
CARMICHAEL, DR. J. A. Heart Failure.................... 74
CARMICHAEL, DR. J. A. Medicine and Religion........... 361

PAGE

CARMICHAEL, Dr. J. A. Nerve and Drug Affinities 15
CARMICHAEL, DR. J. A. The Hospital Origin of Phthisis 108
Cartledge, Dr. A. M. Enormous Gallstone 269
Caruncle, urethral 133
Cataract, incipient 48
Catarrh, naso-pharyngeal 376
Cautery by the sun-glass 62
Chancroids, acetanilid in the treatment of 93
Cheatham, Dr. W. Bony growth of the auditory canal 365
Chilblains, eucalyptus for 157
China, the practice of medicine in 288
Chloroform, oxygenated 103
Chlorosis, hot baths in 318
Chlorosis, sulphur in 160
Circumcision, an easy and ready method of 349
Clairvoyance, the cathode rays of 65
CLARKE, DR. W. B. A Vaccination Statistic Exploded 245
Cobra bite, serum therapy for 253
Cod liver oil, method of prescribing 383
Colds, a cure for 270
Colds, menthol-chloroform for 317
Colic, biliary, ipecac in 283
Colic, hepatic, the use of glycerine for 283
Colic, infantile, lobelia in the treatment of 221
Collapse, ether, camphor in 256
Coma, diabetic, the diagnosis of 379
Common ground, the 209
Condiments, the use and abuse of 254
Constipation, congenital, cream in 223
Consumptives, cold air for 223
Cooking and dietetics 319
Corns, linseed oil for 32
Correction, a 185
Cough, bronchial, prunus Virginiana in 290
Coxitis, tuberculous, diseases simulating 44
Cresol preparations, the clinical value of the, in regard to aseptic surgery 356
Curare as an antidote to strychnine 222
Curette, excessive use of the 191
Cycling as a cause of heart disease 286
Cycling *vs.* morphine 221
Cyst, intraligamentous—pelvic peritonitis—operation—recovery 249
Cystitis, copaiba and oil of sandalwood in 141
Cystitis in women, the treatment of 9
Cyst, mesenteric, simulating enlarged gall-bladder 364
Cyst, ovarian, and pyro-salpinx, 363
Cysts, multiple hydatid, Santini's hydatid-resounding or booming as a diagnostic sign of 191

DAILEY, HON. ABRAM H. Psychological Features of the Hannigan and Aub cases 10

PAGE

DAVIES, DR. W. O. Exophthalmic Goitre 353
Death, rules for the certificates of 341
Death, sudden, among men and women 270
Delirium tremens, the treatment of 136
DESSAU, DR. S. H. Cantharides in Albuminuria 26
Diabetes, diet in 63
Diabetes, grape sugar in the diagnosis of 160
Diabetes, treatment of, by yeast 62
Diabetics, peanut flour for 32
Diagnosis, notes on 377
Diet as a moral agent 338
Dietetics in lay journals 31
Dietetics, Retrospective, 31, 62, 94, 126, 159, 189, 223, 254, 283, 318, 338, 377
Dilators, urethral—new instruments 47
Diphtheria, calomel as a specific in 283
Diphtheria, laboratory for the study of 302
Diphtheria, treatment of, with Behring's serum 125
Dipsomania caused by traumatism 288
Dislocation of patella, gelsemium for 30
Doctors, city and country 313
Doctors of other days 289
"Doctors of Other Days": A correction 341
DOLBEAR, PROF. A. E. The Relation of Physics to Physiology 321
Dual properties of medicine, some 236
Duplay, Prof. S. Diseases Simulating Tuberculous Coxitis 44
Dyspepsia, chronic gastric 69
Dyspepsia, diastase in 377

Ear, the middle, inflammation of, with involvement of the mastoid 100
Eczemata, myrtil a rapid cure for all 61
Edema of the lungs 294
Edema, the diagnostic value of, as a symptom 377
Edema, right-sided, in hepatic disease 378
Editing as a "business." 184
EDITORIALS:
  Abolition of coroners 86
  Abortion 309
  A code of ethics 309
  Airol 183
  Alcohol 53
  Alcoholic beverages 117
  A lesson in psychology 211
  Aletris cordial 371
  A materia medica conference 148
  A new sign of early tabes 215
  A new styptic 118
  Annual dinner of the Alumni Association of the Metropolitan Hospital 370
  Antitoxin 241
  Antitoxin fatalities 180
  Antitoxin plus intubation 118
  A remedy for black eye 146
  A royal M. D 52

PAGE

  Asbestos for surgical dressings 148
  Aseptolin 81
  A sign of death by exhaustion from insufficient nourishment in young children 214
  A test for albumin in the urine 216
  Autotoxic insanity 243
  Benzosol in diabetes 23
  Bone-marrow as a remedy 23
  Calomel 22
  Camphorated salol 21
  City care of the insane 22
  Civil service rules 118
  Clinical urology in infancy and childhood 305
  Closing and dressing laparotomy wounds 278
  Co-education 179
  Colds 118
  Collapse of advertising schemes 95
  Correction 85
  Counting blood corpuscles 149
  Death rates here and abroad 213
  Death rates in New York State 119
  Diabetes 310
  Diagnosis of typhoid 368
  Diphtheria 369
  Dipsomania 181
  Discovery of anæsthesia 339
  Dr. Bismarck 279
  Dr. John Aulde 183
  Dyspepsia and constipation 340
  Early diagnosis of cancer 34
  Effect of ivy on walls 341
  Electrolysis for the treatment of strictures 49
  Enuresis 314
  Epilepsy 84, 369
  Exalgine 53
  Expectoration 50
  Extremes of climate 278
  Female physicians in Herzgovina 308
  Gonorrhœa 341
  Grape fruit 118
  Hahnemann or Hippocrates? 213
  Harvard University Medical School 53
  Heat plague 276
  Helen Keller's address 274
  Homœopathic Medical Society of the State of New York 83
  Honor among boys 53
  How to amputate 84
  Illegitimacy in France 213
  Immortality 82
  Increase of students in medical schools 370
  Imprisonment for life 367
  Influence of music upon the hair 148
  Insanity and the uvula 341
  Insoluble dragees 51
  Insomnia 52
  Inspection of charities 242
  In the heart of the Rocky Mountains 146
  Is there life in the moon? 306
  Is this a cathode ray picture? 117
  Japanese medical staff 116
  Laparotomy for ptosis 242
  Lectures by phonograph 21
  Leprosy 23, 51
  Low death rate 243

PAGE
Malaria in children 309
Malarial plasmodium 85
Mars ahoy! 117
Medical education 113
Menstruation among the Eskimo 370
Methylic ether as an anæsthetic 215
Metropolitan Hospital 308
Mixture for thirst in sickness. 23
Modern medicine and surgery 19
Modified ether administration 215
Monstrosity 23
National Confederation of Examining Boards 22
New application of electricity 370
New journals 52
New preparation of antitoxin. 149
New York medical colleges... 21
New York School of Clinical Medicine 182
Opium 147
Opium poisoning and Pons apoplexy 277
Organic membranes as insulators 277
Oxygenated chloroform 307
Ozone as an antiseptic 278
Pathology of epilepsy and other convulsive diseases 369
Pediatrics 53
Penetrating power of the Roentgen ray 147
Phthisis 307
Phthisis among the insane 212
Physicians' tour in Europe 119
Pilocarpine hydrochlorate 119
Poisoning by antipyrin 216
Poisonous effects of borax 182
Possibly 274
Psycho-therapeutics 340
Quick filtration of urine 181
Rapid dilation of the os and delivery 179
Rapid disinfection 82
Recto-abdominal palpation 22
Resorcin 309
Respirability of vitiated air 213
Restriction of tuberculosis 182
Rights of medical colleges 21
Roentgen-ray in cancer 307
Sanitary burial 275
Scabies 309
Sectarian medical schools 116
Serum cure for the plague 83
Siesta and digestion 214
Sir James Kitson 183
State Board of Health 83
Strychnine in pulmonary consumption 212
Suppression of urine after abdominal section 83
Surgery without pain 147
Surgical Department National Guard 273
Tannalbin 146
Tea cigarettes 85
Test for the humidity of habitable apartments 215
The alcohol and opium habits. 277
The All-Seeing Eye 115
The bicycle face 20
The Insane Commission 306
The Japanese ice bag 85
The *Ladies' Home Journal vs.* quack advertisements 25

PAGE
The largest catheter always 216
The *Medical News* 53
The Metropolitan Hospital 23
The New York Public Library. 85
The *Pacific Coast Journal* 53
The preservation of organized urinary sediments 215
The proper attitude of the profession toward advertised curatives 51
Therapeutic effect of currents of high frequency 276
The sanitarium treatment of the insane 212
The second Pan-American Medical Congress 214
The significance of pain 114
The snakes of delirium tremens 308
The universal ether 49
The urine in typhoid fever 243
Timothy Field Allen's appeal 309
Transplanting the ureters 276
Treatment of pneumonia in children's hospital 145
Tubercular meningitis 309
Typhoid epidemic in New Haven 370
University of Michigan 308
Vaginal *vs.* abdominal section 85
Water 307
Why am I not a Homœopathist? 20
Woman and her bicycle 275
Yeast nuclein in the treatment of hip joint disease 182
You never can tell 243
Electrotherapy as a means of diagnosis in gynæcology 18
Elm bark, slippery, cancer of the rectum cured by 188
Endometritis and vaginitis, senile 381
ENGEL, DR. H. Symptoms of Pons Apoplexy 314
Enuresis from over-feeding 127
Enuresis, mullein oil for 318
Enuresis, nocturnal, elevation of the pelvis as a cure for 94
Enuresis, nocturnal, treatment of, with large doses of atropine 159
Epilepsy, senile, diagnosis of 377
Epilepsy, tansy for 160
Epistaxis, the treatment of 189
Epithelioma, phytolacca decandra for 143
Erysipelas and syphilis 337
Erysipelas, honey in 62
Erysipelas, the treatment of, with applications of vaseline. 253
Ether collapse, treatment of 94
Ethical conundrums 210
Eucasin 254
Europhen, the employment of in venereal practice 190
Evans, Dr. T. C. Report of two tracheotomies for laryngeal cellulitis 357
Examinations, on State 111
Expectoration in Rochester 88
Eye, artificial, sponge as a bed for an 255

Ferratin, iron tonic and food 254
Fibroids, uterine, ergot in the treatment of 156
FISHER, DR C. E. Author, Editor and Critic: The Homœopathic Text-Book of Surgery 141
FISHER, DR. F. R. Stridulation 104
Fistula, anal, collodion in 188
Flesh meat, annual consumption of 240
Flutes, poisoning by 287
Food, digestible 127
Food, Oriental medicinal 94
Food preserver, carbon dioxide as a 32
Foods, artificial, in France 159
Foreign bodies, removal of from the throat 62
Frank, Dr. L. Choice of Methods and Indications for Radical Operation in Puerperal Sepsis 298
Frank, Dr. L. Intraligamentous Cyst—Pelvic Peritonitis—Recovery 249
Frank, Dr. L. Ovarian cyst and pyosalpinx 363
FREEMAN, DR. G. L. Reply to Dr. Patton's letter 184
French Medical Societies, 28, 58, 89, 123, 153, 185, 218, 245, 278, 315, 344, 373
Furuncles and carbuncles, sugar in the dressing of 222

Gall-stone, enormous 269
Gastric affections, some means employed in diagnosis and cure of 350
Gastric and intestinal disorders, hydrozone in 376
Germs, false, detection of by the X-ray 216
Goitre, exophthalmic 353
Gonorrhœa, argonin in the treatment of 94
Gonorrhœa, sodium copaibate in the treatment of 304
Goose grease, the properties of. 157
GORTON, DR. D. A. Psychology of the Unconscious 33, 79
Gossypium herbaceum as an hemostatic 318
Gout, a valuable adjunct in the treatment of 158
Gout, guaiacum in the treatment of 337
Grant, Dr. H. H. Amputation at the Hip by the Wyeth Method 270
GRANT, DR. W. W. Appendicitis; Report of Six Cases... 71
Granulated lids, iodine in the treatment of 254
Guernsey, Dr. Egbert. Testimonial to, in Commemoration of His Semi Centennial in the Practice of Medicine 151
GUERNSEY, DR. E. The Cathode Rays of Clairvoyance 65

HAKES, DR. H. The Nature of Inflammation 129
HALE, DR. E. M. A Correction. 185
HALE, DR. E. M. Copaiba and Oil of Sandalwood in Cystitis. 141
HALE, DR. E. M. Cystitis in Women 9
HALE, DR. E. M. The Common

PAGE
Ground 209
Hannigan and Aub cases, psychological features of the.... 10
Health resorts and baths, the, of Europe and North Africa . 6
Health resorts in Europe and America 134
Heart disease, cycling as a cause of 286
Heart disease, starving in 284
Heart diseases, chorea in 377
Heart failure 74
Heart stimulant 229
Hemoptysis, geranium maculatum in 43
Hemorrhage controlled by electricity 25
Hemorrhage following dilation of urethral stricture—physical non-devolopment at 23—reports of anomalous cases.... 261
Hemorrhage, six cases of 138
Hemorrhage, freezing to arrest. 222
Hemorrhoids, silver nitrate for. 188
Hemorrhoids, spices as a cause of 126
Hernia, four cases of 77
Hernia, the operative treatment of 382
Herpes circinatus, hot water in the treatment of 350
Hiccough cured by putting out the tongue 157
Hills, Dr. A. K. Retrospective Therapeutics, 61, 93, 125, 156, 188, 221, 252, 282, 317, 337
Hip-joint disease, yeast nuclein in the treatment of 282
Homœopathy, typical 311
Hotel, a new American, wanted in Paris 255
Hot water in gynæcology 252
How others see us 88
Hydrotherapy, the importance of precision in the technic of. 284
Hystero-myomectomy. 140

Indicanuria as a symptom of latent suppuration 382
Inebriety, some remarks on: being for the most part a review 56
Infant feeding. 189
Infant feeding: a review 62
Inflammation, the nature of.... 129
Influenza, treatment of 375
Insanity, hyoscin hydrobromin in the treatment of 337
Insanity, the use of the thumbs as a symptom of 288
Insomnia due to noise 158
Intellectual faculties, diseases of the, and certain forms of insanity, caused by congenital deformities of the genito-urinary organs in both sexes.... 234
Iodvasogen 222
Iron preparations, the absorption of 304
Irwin, Dr. J. W. Extra-Uterine Pregnancy 266
Itching, eczematous, ichthyol for 144

Jenks Memorial Prize, The William F 240
Jones, Dr. S. A. Editing as a Business 184
Jones, Dr. S. A. "The Sexual Function" in California.... 271
Jones, Dr. S. A. Typical "Homœopathy." 311

Kerosene in surgery 317
Kidney, floating, with peculiar mental disturbances 37
Kidneys, the, some general observations on the surgery of.. 1
Kola in combination with cereal phosphates 170

Lactophenin, the action of.... 222
Ladies' Health Protective Association, twelve years' work of the 257
Laidlaw, Dr. G. F. Prunus Virginiana in Bronchial Cough 290
Laidlaw, Dr. G. F. Six Cases of Hemorrhage 138
Laird, Dr. E. C. The Use of Buffalo Lithia Water in the Clinique 87
Language, a universal, the need of 382
Lee, Dr. E. The Confusion of the Materia Medica Relating to the Theory and Practice of Medicine 330
Lemon pessary 256
Letter, an open 87
Leucorrhœa, chronic, Donovan's solution for 383
Levantin, a coffee substitute... 254
Lipomata, retroperitoneal, diagnosis of 379
Lithia water, Buffalo, the use of in the clinique 87
Locomotor ataxia, early signs of 383
Lupus, erythematous, a case of, cured by injections of lamb serum 252

Malaria, masked, some little known forms of 378
"Male and Female." 63
Mapes, C. C. Some Remarks on Inebriety, Being for the Most Part a Review 56
Martin, Dr. T. C. An Open Letter 87
Marvin, Dr. J. B. Mesenteric cyst simulating enlarged gall-bladder 364
Massage and medico-gymnastics, therapeutics of 233
Masturbation and spermatorrhœa 351
Materia medica, the confusion of the, relating to the theory and practice of medicine 330
Matthews, Dr. J. M. Some Vagaries in Rectal Practice.... 149
McMurtry, Dr. L. S. Some General Observations on the Surgery of the Kidneys 1
Meat diet, benefits of a 159
Meat diet, lean, dangers of the. 283
Meat eating, excessive, ill-temper a symptom of 159
Medical Century, the 351
Medicine and religion 361
Melanosis of the skin from arsenic 378
Menstruation, cold bathing during 125
Menstruation, vicarious, a rare variety of 378
Mental element, the, in therapeutics. 178
Mental power from manual training 382
Metric system simplified, the... 272
Metropolitan Hospital, Blackwell's Island; Genito-Urinary Ward 302
Middleton, Dr. G. Health Resorts in Europe and America 135
Middleton, Dr. G. The Health Resorts and Baths of Europe and North Africa ... 6
Milk, concentrated 189
Milk, condensed, germs in 31
Milk, modified 31
Milk, preparation of, for infant food 63
Milks, artificial, deleterious.... 189
Milk, small quantities of iron in. 63
Miller, Dr. H. T. Lactophenin in Typhoid Fever 123
Miscellany, 32, 64, 96, 128, 160, 192, 224, 256, 288, 320, 351, 384
Montreal letter 142
Morgan, Dr. W. F. Chronic Ulcer of the Leg 237
Morgan, Dr. W. F. Talks with Young Men Upon the Sexual Function.....198, 225, 234
Morphine and cocaine, antagonism between 349
Morphinomania, rapid treatment of 159
Moving toward the light 351
Mumps, turpentine as a remedy for 188

Nature, following 55
Nephritis, cantharides in 57
Nephritis of pregnancy 47
Nerve and drug affinities 15
Nervous affections, skullcap in the treatment of 318
Nervous and mental disease, diet in 318
Neuralgia, trigeminal, electricity in 96
Neurasthenia, remedies in 158
Nonagenarian practitioner, a.. 226

Obituary:
  Bostwick, Hon. William L... 319
  Erichsen, Sir John Eric.... 352
  Graham, Hon. James G.... 63
  Mott, Henry A., M.D., Ph.D., LL.D. 383
  Rankin, Francis H., M.D., of Newport, R. I. 383
  Richardson, Sir Benjamin Ward, M.D 383
Ohio Medical University, department for midwives in.... 261
Onions as a nervine 223
Oldest physician in France, the. 170
Oleomargarine and natural butter 32
Orchitic extract 30
Ostrom, Dr. H. I. 271
Ostrom, Dr. H. I. The Treatment of Diseases of the Pelvis by Operating Through the Vagina—Vagino-Pelvic Operations 325
Ostrom, Dr. H. I. The Use of Dry Sponges in the Toilet of

PAGE
the Peritoneum 265
Oxalic acid as a germicide 382
Oxygen-ether anæsthesia, praccal use of 383
Oxygen, therapeutic value of 188
Oxyuris vermicularis, naphthalin for 283
Ozena, boro-glycerine for 32

Pain, the form of electricity best adapted to the relief of 31
Pan-American Medical Congress, the second 210
Paralysis, cerebral spastic, in children 377
PARKER, DR. W. T. Our Boston Letter 217
Pasteur 27
Pathology, comparative at Harvard 232
Pat's criticism 304
PATTON, DR. H. M. Montreal Letter 142
Patton's letter, reply to Dr 184
Pediatrics: Rheumatism in infants 121
Pelvis, the treatment of diseases of the, by operating through the vagina — vagino-pelvic operations 325
Perforation, intestinal, the early diagnosis of 378
Peritoneum, the use of dry sponges in the toilet of the 264
Pertussis, hydrochlorate of phenocoll for 318
Pertussis, thymus serpyllum in 188
Philadelphia letter, our 27
PHINNEY, H. K. Expectoration in Rochester 88
Phonendoscope, the new 352
Phthisis cured by strychnine 126
Phthisis, the hospital origin of 108
Physics, the relation of to physiology 321
Pineal body, the 189
Piperazine as an eliminant of uric acid 158
Pleurisy, diseases which may simulate 191
Pneumonia, cold applications in 126
Pneumonia, ice cream in 32
Poisoning by flutes 287
Poisoning from dried beef and pressed chicken 126
Poppies 2,000 years old 304
Potain, Prof. Edema of the Lungs 294
Pregnancy, diet in 63
Pregnancy, ectopic, diagnosis of 378
Pregnancy, extra uterine 266
Prescriptions, fantastic 57
Prostatic enlargement or hypertrophy. Its cause, prevention and treatment, remedial and surgical 193
Prunus Virginiana (Cevasus Virginiana) 341
Psychology of the unconscious 34, 97
Pulmonary affections, new device for treating 158

Ray progress 127
Recipe, medical, the oldest 192
Rectal affections, rhatany in 283
Rectal practice, some vagaries in 149
Rectum, the mucous membrane of the 285
Rejoinder, Dr. Terry's 142
Resounding or booming, Santini's hydatid, as a diagnostic sign of multiple hydatid cysts 191
Rheumatism, cold applications in 320
Rheumatism, Dr. Depew on 304
Rheumatism, how to cure 366
Rheumatism, new method of applying heat in treatment of 384
Rhubarb (rheum), the detection of, in the urine 378
Ringworm, common salt as a remedy for 61
RITCH, DR. O. S. On Shock as Relative to Surgical Conduct 328
Roberts, Dr. W. O. Four Cases of Hernia 77
Rubber articles, vulcanized, to preserve 128

Sakorraphos, Dr. M. Tortuosity of the Temporal Artery and its Clinical Significance 252
Salt water enemata, hot, as a stimulant 222
Sand bath, the, as a cure 188
Scabies, nicotine soap as a specific in 224
Scabies, the balsam of Peru treatment of 253
Scarlatina, disinfection of the mouth in 337
Schachner, Dr. A. Hystero-Myomectomy 140
SCHALL, DR. J. H. Antiseptic Treatment of Burns 265
SCHALL, DR. J. H. Oxygenated Chloroform 103
SCHALL, DR. J. H. The Management of Accidents Occurring During the Administration of a General Anæsthetic 40
SCHERINI, OTTO. Scoliosis 291
SCHERINI, OTTO. Therapeutics of Massage and Medico-Gymnastics 233
Sciatica, nitro-glycerine in the treatment of 283
Sciatica, the treatment of by compression 254
Scoliosis 291
Scorpion stings, sugar or honey for 317
Scurvy, infantile 284
Sea-sickness, sea-water as a preventive of 320
Sepsis, puerperal, choice of method and indications for radical operation in 298
Sero-therapy, some early experiments in 66, 106, 175, 207
Serum, anti-venom 283
Serum, horse's, as a general tonic 253
Sex of the fœtus, detection of by heart-sounds 191
Sexual function, a study of some drugs in so-called derangement of 12
Sexual function, talks with young men on the 198, 225, 334
"Sexual function," the, in California 271
Shock as relative to surgical conduct, on 308
Silkworm gut pliable and antiseptic, to render 272
Similars, the law of, and the law of contraries, in defence of 202
SIMMONS, DR. F. A., How Others See us 88
Skin diseases, necessity of strict dieting in 338
Sleep, a hot bath will bring 270
Sleeping, is there any "best" time for? 350
Society, an anatomical theory of 176, 205
Sodium chloride in the nasal cavity 318
Sodium chloride, the dietetic influence of 223
Soup, food value of 127
Sponge as a bed for an artificial eye 255
Sprain treated by massage 30
Stridulation 104
Substitutes, vigorous action against 245
Sugar in urine, quantitative estimate of 47
Surgery, the Homœopathic textbook of 120
Syphilis, abortive treatment of 125
Syphilis, diagnostic nervous manifestations of 287
Syphilis inherited, is it contagious? 351
Syphilis, treatment of, with small doses of mercury 282

Tartar emetic as an oxytocic 160
Tendon grafting 349
TERRY, DR. M. O. Rejoinder 142
Tetanus, carbolic acid a cure for 103
Theobromine in renal and cardiac disease 253
Therapeutics, retrospective, 30, 61, 93, 125, 156, 188, 221, 252, 282, 317, 337, 376
Thermometer, a dumb clinical 288
Throat affections, cocapyrin in 283
Thrombosis of the cerebral sinuses after suppuration of the middle ear, diagnosis of 378
Thyroid extract in surgery 222
Thyroid treatment, dangers from 32
Tongue, indications of the 288
Tooth-wash, Nature's 224
Tortuosity of the temporal artery and its clinical significance 252
Trachelorrhaphy, Prof. Goelet's methods in 352
Tracheotomies for laryngeal cellulitis, report of two 357
TRAUTMAN, MRS. RALPH. 12 Years' Work of the Ladies' Health Protective Association 257
Trional, clinical observations upon 376
Tuberculosis, concealed 191
Tuberculosis, diet in 126
Tuberculosis, phosphated milk in the preventive treatment of 192
Tuberculosis, pulmonary, the first symptom of and its detection by the fever thermometer 286
Typhoid fever in cities 379
Typhoid fever, lactophenin in 123
Typhoid fever, management of 94
Typhoid fever, the banana in 223

PAGE
Ulcer, chronic, of the leg...... 237
Ulcer of the stomach, diet in... 223
Ulcers, hot compresses for..... 318
Unconscious, psychology of the.................... ....33, 97
Urethritis, chronic posterior... 362
Uric acid, piperazine as an eliminant of..................... 158
Uterus, the retro-deviations of, the surgical treatment of 381

Vaccination in Italy 192
Vaccination statistic exploded, a. 244
Vaccination, Virchow on....... 351
Vibratory habit, the........... 320
Voice, photographing the...... 320
VONDERGOLTZ, DR. E. The clinical value of the cresol preparations in regard to aseptic surgery 356

WARNER, DR. F. P. Chronic Gastric Dyspepsia........... 69
Water, how much should we drink?..................... 338
Watson, Dr. W. H. On State Examinations............ . 111
Weidner, Dr. C. Floating Kidney, with Peculiar Mental Disturbances 37
Weidner, Dr. C. Anthrax..... 331
WENDT, DR. C. J. Geranium Maculatum in Hemoptysis... 43
WHITE, DR. W. S. Cantharides in Nephritis................ 57
Whooping cough, ozone in..... 188
Wilde, Dr. P. In Defense of the Law of Similars and the Law of Contraries........... 202
WILLIAMSON, DR. A. P. The Treatment of Delirium Tremens.......... 136
Wood, Dr. H. C. Heart Stimulants.......................... 229
WOOD, DR. J. R. Doctors of Other Days.................. 289
WOOD, DR. J. R. External and Internal Use of Ox Blood.... 42
WOOD, DR. J. R. Some Early Experiments in Sero-Therapy, 66, 106, 175, 207
Wounds, treatment of, by formalin..................... .. 282

YBARRA, DR. A. M. F. DE. Kola in Combination with Cereal Phosphates........... 170

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ORIGINAL ARTICLES.

SOME GENERAL OBSERVATIONS ON THE SURGERY OF THE KIDNEYS.

BY L. S. MCMURTRY, M.D., LOUISVILLE, KY.,
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SINCE Listerian methods have been introduced into surgery, and the surgery of the abdomen has become established, the surgery of the kidneys has assumed conspicuous proportions. It is important to observe that the right kidney is three-quarters of an inch lower than the left; that the kidney is behind the peritoneum, and that the ureter is entirely retro-peritoneal.

Among the most conspicuous symptoms that relate to the kidney, to which the attention of surgeons is called, is that of floating kidney; and it is more frequently on the right side than the left, I think, from the fact that I have mentioned, *i. e.*, the anatomical relations of the right kidney.

Physicians who give special attention to physical diagnosis attach much importance to movable kidney. Severe paroxysms of pain are attributed to the twisting of the nerves which supply the kidney when the kidney is floating. I have met with very few cases of floating kidney associated with paroxysmal pain; I do not mean to say that such condition does not obtain, but I think it is more rare than we are prone to believe. When a person has a floating kidney, and it is more frequent in females than in males, any disturbance of the digestive functions or pelvic organs characterized by pain is apt to be attributed to the floating kidney.

Floating kidney results from loosening of the tissues surrounding the kidney. The kidney is held in place by the attachment of the peritoneum to the perinephric fat, and any wasting disease, by causing absorption of the fat, permits motion and elongation of the peritoneal folds. Traumatism may dislocate the kidney and render the organ mobile. This is, of course, very much increased by the abdominal muscles being distended so as to lose their tone, as from child-bearing or other causes which impair muscular support; consequently, we find this condition more frequently in females who have borne children.

Several operations have been devised for anchoring the kidney in its proper position. I remember in talking with Dr. Senn, of Chicago, two or three years ago, he invited me to be present at an operation (which I was unfortunately unable to do) where he proposed to wire the kidney to the twelfth rib. I believe that the aggressive character of modern surgery has overestimated the necessity of operating upon simple movable kidney. When this operation is performed it is necessary to pursue the course in the operative technique that is observed in posterior nephrotomy or nephrectomy; to cut down upon the kidney with the patient in the prone position with a pad underneath the opposite side, so as to elevate the field of operation; cutting down immediately over the kidney so as to reach the perirenal fat; then by placing silver or silkworm gut sutures through the capsule of the kidney attach it to the muscles. This is the most common method of suturing the kidney. The ultimate results of the operation, so far as I have been able to learn, are not encouraging.

A very common condition in renal pathology, in which modern surgery has achieved some brilliant results, is that of calculi. Salts of the urine deposited upon some colloid material become encysted, forming a calculus in the kidney itself. The painful passage of a small calculus along the ureter is a common clinical observation. A calculus may become engaged in the ureter and become lodged there, producing hydronephrosis; it may pass down into the ureter for a distance and after remaining for a time pass on into the bladder; or a calculus may be in the pelvis of the kidney, barely engaged in the ureter and too large to pass. Of course I will not take the time to discuss the symptoms, but will only give a general outline of the pathological process. When the symptoms are of a character which indicate such a pathological condition as this, the surgeon is justified in making an incision down to the kidney, introduce a needle, or, if necessary, make an incision and introduce the finger, to determine the existence of calculi. The damming up of the urine and the results which follow are quite familiar. The condition of hydronephrosis may become a pyonephrosis.

Injuries of the kidney are not very common; they sometimes occur from stab and other wounds. The symptoms are usually very marked, hematuria being the most prominent. In this condition, drainage, and if necessary repair of the kidney, constitutes the only appropriate procedure.

Cysts of the kidney are among the rather common conditions of renal disease.

A year ago last July I operated upon a young German woman of this city that I am sure any physician or surgeon would have unhesitatingly pronounced the subject an ovarian cyst. The tumor occupied the pelvis and abdomen, pushing the uterus out of the normal position. It was as large as a half bushel. I opened the abdomen in the usual line for ovariotomy and in cutting through the peritoneum and introducing my finger I found a double layer of peritoneum and supposed I was confronted with an intraligamentous ovarian cyst unfolding the broad ligaments. Passing my finger down and exploring, I found both ovaries and the uterus quite normal. I soon discovered that I was dealing with a cyst of the left kidney and proceeded to remove it. The cyst was filled with fluid as clear as spring water. The woman made an easy recovery and is in robust health now. Such a cyst as that is quite rare.

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* Read before the Louisville Surgical Society. Stenographically reported for this journal by C. C. Mapes.

Hydatid cysts of the kidney are among the pathological conditions of these organs. The hooklets are usually to be found in the urine, and lead to the diagnosis.

Tumors of the kidney are very frequently malignant. Medullary cancer is very common; sarcoma is also of frequent occurrence, and these malignant tumors usually occur in the very young, or in the very aged.

Tuberculous kidney is another pathological condition which is not at all infrequent. The diagnosis can usually be determined by indications of tuberculous disease in other parts of the system. Operative treatment for this condition promises very little.

Abscess of the kidney, such as evidenced by the specimen I present this evening, is among the common lesions of the kidney; it is frequently due to the presence of calculi; sometimes due to the spread of suppurative infection along the ureter from the bladder from various causes, and the condition is very amenable in the early stages to surgical treatment. When it is one-sided an incision may be made by the posterior route. Nephrotomy in the early stages is the most successful operation. The kidney is incised, the abscess evacuated altogether extra-peritoneally, gauze drainage established. When the abscess extends to the extent that a nephrectomy is advisable, of course it is a more complicated and more difficult operation.

Hydronephrosis is invariably mechanical and obstructive; and in a large number of cases is congenital.

It is my purpose, in these remarks, in connections with the specimen I have exhibited, to simply outline the scope of renal surgery, and not to attempt an elaborate essay upon special conditions of disease.

Dr. Turner Anderson: I am particularly interested in the question of movable and floating kidney, and am disposed to attach more importance to the development of digestive disturbances, etc., than Dr. McMurtry has done. We all recognize that we have encountered this condition of movable or floating kidney much more frequently since attention has been more particularly directed to abdominal surgery, and in connection with tumors of the abdomen. In my examination of women I encounter a very much larger percentage of movable or floating kidney than I formerly did. I have been especially interested in an article written by Dr. Stewart, of Columbus, Ga., upon this subject. He has gone over the whole subject in a very exhaustive way, and presents it in a manner that coincides with my personal experience. He classifies the digestive disturbances, etc., into three or four classes. He speaks of neurasthenic symptoms produced by movable or floating kidney; also very decided symptoms of hysteria in women; but the most prominent symptoms relate to digestive disturbances, such as dysentery, occasional diarrhœa, etc. I am sure that I have seeen decided digestive disturbances produced by movable kidney.

I did not notice that Dr. McMurtry made the distinction brought forward in Gregg Smith's work between *floating* and *movable* kidney. I will not discuss the paper by reporting cases, but I have seen several where permanent cures resulted when the cases were properly understood, the treatment being the ordinary treatment of rest and building up of the patient, together with a properly applied bandage.

I have never seen the operation of wiring the kidney performed, and do not know of many surgeons who are familiar with the procedure. It is frequently spoken of by Northern surgeons as a simple operation. Patients may come to us who have a floating kidney presenting all the typical symptoms described, and if we do not operate upon them, they go east, and surgeons there tell them that their whole trouble is referable to the kidney, which may easily be remedied by making an incision and tying the kidney to the muscles of the back. As a case in point, a prominent lady in this city, who has presented some curious symptoms for a long time, recently came under my care; the first thing I discovered in connection with the case was a movable or floating kidney. This patient went east, and was under the care of Dr. Goodell, who treated her by the usual non-operative methods, rest, etc., for six weeks, and told her if the kidney gave her any further trouble it would be a very simple operation to tie it to the muscles of the back. This patient presents a number of very annoying nervous phenomena, and I am quite convinced from what I have seen of the case that these disturbances are the result of the floating or movable kidney. She has a large kidney; it can be carried about; it is not necessarily a diseased kidney; in fact, the patient's general health is very good; it is sometimes lost and cannot be found again at a single examination; it can be made to descend quite low, almost to the crest of the ilium. She has had her uterus scraped; the cervix has been operated upon for laceration, that, too, after she had passed the climacteric period; she has had an operation performed upon the cervix for the relief of these disturbances, and all this time the kidney trouble was recognized, but no especial attention paid to it, and no effort has been made to restrain or confine its movements.

It is very important to remember certain anatomical points in connection with the kidney; that it is behind the peritoneum, and no doubt in many cases diagnosis has been made of abdominal tumors, when the trouble was demonstrated later to be connected with the kindey.

Dr. J. G. Cecil: Concerning movable kidney: I have in mind now a case which Dr. McMurtry saw with me—rather he saw the case for me at a time when I was unavoidably detained—in which one of the very prominent symptoms was paroxysms of pain that the doctor in his remarks said was not regarded as very common, and which he had seldom seen. This case I am sure from the subsequent history must have been one of movable kidney. Nothing else would conform to the symptoms as far as we can judge, by such means of diagnosis as we have at hand, in making the diagnosis of abdominal tumors. It is the right kidney in a maiden lady, æt. thirty-six years; the kidney appears to be about normal in size, and can be readily felt in its abnormal situation. It is not accompanied by very much general constitutional disturbance, but rather with pain and more or less disturbance of the digestive organs, constipation, loss of appetite and loss of flesh. These paroxysms of pain are so severe that it requires opium to relieve her at times. The tumor rests very low in the abdomen, about two inches below the normal site of the kidney, which brings it just to the superior part of the crest of the ilium. It is not very tender, but answers every description of movable kidney. The woman has a very pronounced rheumatic history, and also indications of well-marked heart disease. She is being treated by rest in bed, opiates as necessary to relieve pain, and in addition to this such remedies as are called for to keep the bowels in proper condition.

In regard to abscess of the kidney: I was very much pleased to see Dr. Pozzi operate on a case in which he started out with the intention of removing the kidney, but, having cut down into a very fat subject, he found a small portion of the kidney involved, and, instead of removing the kidney, packed it all around with iodoform gauze, and used the Paquelin cautery a great deal in getting to and opening the abscess. He thought he was justified in leaving it, because he believed that part of the kidney left would be serviceable after the abscess cavity was properly drained. I believe the patient would have been better served by removing the entire kidney. The operation was done by the lumbar route, in Dr. Pozzi's private hospital in Paris.

I have under observation now an old gentleman who presents a line of kidney symptoms which are in some respects rather peculiar, and for a year I have been looking for something definite to develop. It is a case of pronounced hematuria without symptoms, which has existed for a year. This old gentleman, aged seventy-five years, a large, healthy looking man, has been passing blood almost every day, sometimes large quantities of urine passed are heavily loaded with blood, which has been diagnosed by chemical analysis to be from the kidney. Notwithstanding this he has gone on without any variation and apparently without much benefit, until lately he has begun to show decided emaciation and symptoms indicating simply loss of blood. One peculiar feature, which indicates that it must be kidney trouble and only one kidney, is that at times during the day he will pass perfectly clear urine, then perhaps after several hours he will pass a few clots, followed by bloody urine, indicating that one ureter is obstructed by blood clots; then after passage of the clots the urine is freely mixed with blood. There is not, and has never been, the least pain, not the slightest sign of a tumor, and nothing else to indicate the cause —it is simply a case of hematuria without symptoms. I have ventured the diagnosis that there must be a small papillomatous growth in one kidney. I think had it been cancer, which might be suggested on account of his age, it would have terminated his life before this, or certainly he would have developed pain and a tumor, which are the most prominent symptoms of cancer of the kidney. I believe, also, had it been stone in the pelvis of the kidney, pain would have been one of the first symptoms.

Dr. A. M. Cartledge: So many points suggest themselves in connection with the paper read by Dr. McMurtry, that it would hardly be possible to discuss them in detail. First, as regards movable kidney: I think the classification of this affection might still be modified to advantage and make it more accurate, that would be (1) *displaced kidney*, (2) *movable kidney*, and (3) *floating kidney*. The fact is, we often have kidneys displaced and fixed, as I had occasion to observe a few weeks ago. The kidney was standing right on its end and absolutely fixed, being adherent to the lower margin of the liver. It was the right kidney, and its location was such that it had every appearance of being an enlarged gall bladder. An incision proved it to be the right kidney, which was fixed to such an extent that it was impossible, with the hand on it, without doing violence to the condition, to attempt to replace it in the normal position. Therefore I say there is a *displaced* kidney, which does not come under the head of *movable* or *floating* kidney. I believe a floating kidney is supposed to be one where it has a mesonephron.

In regard to the symptomatology of floating kidney: I agree with Dr. Anderson that this condition often gives rise to very marked symptoms, gastric symptoms especially, and their occurrence is so universal in these cases that they can hardly be attributed to anything else.

As to the pathology of the gastric symptoms: It has usually been attributed to a twisting of the kidney pedicle. I have sometimes thought there is another explanation of the peculiar nausea, and that is retention. That, by the way, is a very important thing when suspecting floating or displaced kidney. These patients almost invariably complain of having periodical flooding of the urine, as it were; probably for twenty-four hours they will pass not to exceed twelve ounces of urine, then during the next twenty-four hours pass sixty or eighty ounces, and it is during the periods of retention that the gastric symptoms are most marked.

As to operations for the relief of this condition, I would like to correct one impression that seems to have gained ground, concerning the operation of cutting down and anchoring the kidney to the muscles or the rib. Results in the hands of men who have done a great many of these operations, prove that relapses of the condition are very frequent, that the anchoring may fail to hold the kidney in its proper position, and simply stitching the capsule, as suggested by Dr. McMurtry, often results in failure; after a few months the kidney again begins to wander.

The best paper I ever heard upon this subject was one read before the last meeting of the Southern Surgical and Gynæcological Society by Dr. Johnson, of Richmond, Va. He reported thirty-five cases upon which he had operated without a death, and reported them in detail. He suggested a little different technique from that ordinarily employed. He makes a free incision down to the kidney, carrying his suture quite deep into the substance of the kidney, suturing it to the deeper layer of muscles and fascia; he also suggests, by means of making an additional safeguard, to not close the wound, so as to get union by first intention in the strict sense of the word; he said he wanted to get a certain amount of plastic exudation, and his object was to so treat the case as to increase the amount of exudation and consequent adhesion, in order to prevent recurrences that so often occur after the ordinary operation of fastening.

In reference to the paper Dr. Anderson quotes: The author's deductions are entirely erroneous. I do not think any form of mechanical contrivance can be sufficient to hold the kidney in position. Owing to the conformation of the anterior abdominal wall, we are not able to produce direct pressure sufficient to support the kidney in its proper situation. I have treated one case by this method, but my success was not such as to encourage its further employment.

Abscess of the Kidney and Nephritis.—Unfortunately these cases do not promise very brilliant results from operative interference, from the fact that they are nearly always bilateral. We hope for the best results in those cases of suppurative pyelitis or abscess from calculus, but where we have suppurative pyelitis, the result of extention of septic infection from the bladder, as they are nearly all bilateral, operative procedures do not promise very brilliant results.

Dr. W. C. Dugan: The question of floating kidney is especially interesting to me, and I am surprised to find that so few of the surgeons present have operated upon such cases. I hardly believe the symptoms Dr. Cartledge speaks of can be due to retention of urine; I am of the opinion they are due to some nervous disturbances which I am unable to explain, brought about by the retention of urinary salts in the blood. I recently operated upon a patient for floating kidney, by making a posterior opening and stitching the kidney to the fascia. Instead of splitting the kidney proper, as Dr. Cartledge has mentioned, I simply split the capsule and stitched it to the fascia with a large curved needle, using silk worm gut as suture material, and to make it doubly sure, some three or four deep sutures were applied by going deep down into the kidney substance with the curved needle. The patient was passing only ten ounces of urine daily before the operation; this was increased to twelve ounces the second day; and, strange to say, within a week after the operation she was passing more than double the usual quantity of urine per diem; one day she voided as much as three quarts. I am unable to explain it. It could not have been due to twisting of the ureter, because she had no symptoms of that condition. The patient had no dilatation, or but little, of the pelvis of the kidney, so the trouble could not have been due to retention; therefore, I claim that the symptoms are due to some nervous disturbance, produced by the salts of the urine acting on the brain cells. As to the question of packing: This patient had disease of the pelvis (chronic pyelitis) of the kidney, and as a result there was a deposit of urinary salts; this was scraped out, and to right that condition of chronic pyelitis the wound was packed with gauze and left open. Patient was allowed to go home while the wound was filling up, and although she had improved some she was still in a bad state of health. The wound continued to suppurate so profusely that I decided to remove the kidney, so she was brought back to the city, and then for the second time an incision was made at the same site by following the fistula, and we found that the adhesion of the kidney to the structures where sutured was very firm, so showing that the success of the primary operation was perfect, for it was with some force that it was dislodged from its new attachment. I have not had a failure so far.

Abscess of the Kidney.—I am sure that the best operation is by the posterior route. At any rate, at the primary operation it is best to make a posterior incision, open the kidney and secure drainage. When these patients come to us they are full of septic material, and so by doing the operation at two sittings we get rid of the septic material, which, if allowed to remain, will do much to endanger the life of our patient, if not cause the death. After getting rid of the septic material by drainage, the patient usually becomes markedly improved, and, too, his appetite comes to his rescue; then if it is necessary later to remove the kidney, the patient has sufficient vitality to withstand the operation, and then, if for any reason we prefer the laparo-nephrectomy, we can cut down upon the capsule from the front. I think, in selecting the anterior or anterior-lateral incision, especially in those cases where we are going to remove a suppurating kidney, we should cut down upon the peritoneum; and then, with the handle of the scalpel, carefully push the peritoneum up out of the way. Now, if we make a good, long incision, the kidney is exposed, and when carefully separated from the surrounding structures a ligature can be thrown around the kidney blood vessels and then securely tied and cut off, and all done without invading the peritoneal cavity. In operating for cyst of the kidney the same method might be selected, yet the same reason does not prevail. In fact, I prefer laparo-nephrectomy for tumors of the kidney, for here, as a rule, we have to deal with a large mass, and then we subject our patient to the risk of sepsis, which is known to surround the simplest section and no more, which risk I consider less hazardous than operating to the disadvantage we experience doing the extra-peritoneal nephrectomy.

I remember a case I operated upon not long since; there was a very large tumor, which would hold at least three to five quarts of pus. The patient lived in the country, and was brought here on a cot for operation. Dr. Chenowith was present, and I do not know how much pus we drew off through a free incision, made in the linea-semilunaris; so went in behind the peritoneum, in fact did not see it at all; washed the pus out carefully, and then to be sure that none was left, the hand was introduced and each compartment was scraped out, and the wound packed with gauze. She went home on the tenth day after operation, much improved, having no fever and was eating some, and weighing not over sixty-five pounds. I received a letter from her mother, a few days ago, stating that her daughter was in excellent health, and weighed 120 pounds. In this case there was an enormous abscess of long standing, yet there was no history of an injury or any of the infectious fevers that are thought to cause them generally. The disease was unilateral in this case. There has been no evidence of a recurrence. I have had a number of such cases, and am thoroughly satisfied that the best surgery here, as elsewhere, is that which saves the greatest per cent. of patients that are so operated upon. If I had made an attempt to take this kidney out, why, there is no doubt but the last part would have been a *post mortem*. Then there is another point against primary nephrectomy, and that is no one can say when a kidney is beyond Nature's ability to patch up. And there is still another reason against it, which is our patient may have but one kidney, or we may be operating on the best one. So open behind and drain, and then let results determine the future.

Dr. I. N. Bloom: One point of importance has occurred to me in connection with the paper read by Dr. McMurtry, and especially is this applicable to cases of abscess of the kidney, *i. e.*, our ability to determine whether one or both kidneys are affected. It has been claimed recently, especially by eastern surgeons, that they have been able to catheterize the ureter by means of the cystoscope. When that can be done, in the male (and I suppose it is possible), we will have an unfailing method of determining which kidney is affected, and whether one or both. I take it that there may be men who could occasionally, at least, catheterize the ureters, but they undoubtedly have a skill which few of us possess. Among 100,000 doctors, we would probably find not more than one man who has the ability to carry out this procedure.

I believe a good suggestion would be to do a suprapubic operation, going into the bladder and catheterizing the ureters to determine which kidney is diseased, before performing the operation of nephrectomy. The dangers of suprapubic cystotomy are not great, especially where the bladder itself is not extensively diseased.

In the later writings no distinction is made between *movable* and *floating* kidney, and the term *floating kidney* is entirely done away with. Morrow states, in his latest work, that the distinction is an unnecessary one. I have seen two cases, both of which were under the care of Dr. Anderson, and both recovered. In these two cases very decided stomach and intestinal symptoms were present, but nausea and emesis were the principal symptoms manifested. The treatment was simply rest, and compression by means of a pad and bandage. In the first case the diagnosis of floating kidney was made, and the misplaced kidney could be felt. The patient has gone for four months without any symptoms, and the kidney has apparently remained in its normal situation. In the latter case the diagnosis was made purely by exclusion, by the location, etc. I saw the patient to-day, and she stated there had been no return of the trouble. In this case the patient told me that she did not pass over ten to twelve ounces of urine in the twenty-four hours. A sample was carefully examined and found to be normal.

Dr. A. M. Vance: Surgery of the kidney is one of the most difficult problems with which the surgeon comes in contact, not only in the diagnosis, but oftentimes in the operative procedure. One point that we must bear in mind is that surgeons are not usually called upon to treat these cases of abscess of the kidneys—pyelitis—until they have been treated for months, and often years, for disease of the bladder, etc. The physian often overlooks cases of pyelitis, for instance, until the golden opportunity has passed for doing the patient much good by any surgical operation.

One of the most important things to consider in operations upon the kidney is the choice of an anæsthetic. If any trouble about the kidney is suspected we should always use chloroform as the anæsthetic. Oftentimes, after abscess of the kidney is relieved by nephrotomy, we have the greatest difficulty in relieving the trouble consequent upon it.

Dr. James S. Chenoweth: At the June, 1894, meeting of this Society, I reported two cases of suppurative pyelitis upon which I had operated a short time before, and made a few remarks as to the diagnosis and treatment. A week after that meeting I operated upon the third case, and it might be of interest to refer to them briefly. I showed one of the cases since recovery at one of our Society meetings several months ago.

The first case was a young man who had a displaced kidney, which seemed to be enlarged, but this proved not to be the case; it was normal in size, but was displaced downward, moved with respiration, and he suffered from every symptom of stone in the kidney; he had almost constant pain; the appearance of blood in the urine, occasionally some pus. For a time the tumor seemed to increase in size very perceptibly, and during this period no blood was observed in the urine; then blood would be voided in considerable quantities, and the tumor would decrease slightly in size. There was at all times great discomfort. The urine was examined repeatedly, and the indications were simple congestion of the kidney, with a little pyelitis—hardly enough to account for the trouble. An operation was advised and accepted. We cut down upon and incised the kidney, evacuating a small quantity of pus, introduced strips of gauze for drainage purposes, and, pushing the kidney up to the diaphragm, packed gauze underneath the kidney to hold it up in position, or as nearly so as practicable. It could not be pushed up quite to the normal situation, but it has remained just where it was fastened. The man experienced a great deal of relief, but developed dysentery, which lasted for a week after the operation. Since that time he has improved in health, and has gained fifteen pounds in weight, but is far from a well man. A recent examination of the urine shows some albumen and tube-casts, and the probabilities are that he has chronic inflammation of the kidney operated upon, and possibly the other one. The opening in the kidney healed perfectly in fifteen days after the operation.

The second case was operated upon only a few days before my previous report. The patient was a woman, who had an abscess very much like the case shown by Dr. McMurtry to-night, except that the kidney itself was almost entirely destroyed. The woman was profoundly septic, having the characteristic sweating observed in such a condition, and had been suffering for eighteen months. The trouble was produced by pressure of the fœtal head on the ureter. Three months before delivery she developed severe kidney symptoms, which had continued up to the time I saw her. I did a nephrotomy in this case, stitching the kidney up to the abdominal wound, putting in a large drainage tube—a piece of a No. 10 stomach tube—which kept up perfect drainage for several months. The patient made a nice recovery. She had pus in the urine for some time after the operation, but it is now clear. The ureter was so dilated that I could attach a syringe to the opening in the kidney and run water through into the bladder, and by putting a catheter into the bladder convey the water out into the basin. It was several months after the operation before the wound closed, and I am satisfied that the remnant of kidney will have to be removed before recovery is complete and permanent.

The third case was one that evidently started in an urethral inflammation and stricture. The patient is a young man, æt. about twenty-seven, who had been suffering for a year or so with urethral trouble, which had been followed by a cystitis. When I saw him, for several months he had been having fever and sweats ; he had become considerably emaciated, and was suffering with pain in the bladder ; he also had severe spasms of the neck of the bladder. I could put in a No. 20 American steel sound ; the neck of the bladder would shut down upon it firmly, and withdrawing this sound could not introduce a soft instrument five minutes afterward. After washing out the bladder for a week or ten days, the fever and sweating continuing, in an examination of the kidney region I found considerable tenderness over the left kidney, and after several days could make out what I thought to be an enlargement. Taking this in connection with the other symptoms, I advised a nephrotomy. His temperature at this time was 104° F. pulse 130. Cutting down upon this kidney from behind, using the transverse incision (it being straight across, doing less damage to the nerve and muscles than any other method), I found the kidney enlarged and very tense. On incising the convex border of the kidney, three-fourths of a pint of pus, which was damned up in the pelvis, causing great distension, spurted out through the small puncture. Exploring the kidney I found no stone.

I put a very large drainage tube—No. 10 stomach tube—in the kidney, draining it in this way. I did not stitch it up to the wound. Pus discharged freely from it, and he had very little trouble with the kidney wound. The bladder trouble continued practically the same after the operation, and pain was intense at times. I tried all manner of treatment for relief of the bladder symptoms—I treated it and let it alone—did almost everything I could think of without seemingly affecting it very much. He has no pain now, and the urine is perfectly clear. I kept the large drainage tube in the kidney for two months, then inserted a smaller tube. The wound has almost entirely healed; there is still a little leakage, and it is necessary to dress the wound once, sometimes twice, a day.

One thing I have been struck with is that all the urine discharged from this case has been perfectly clear. The case has been under observation for the last three months, and since the operation all urine which came from the kidney gave no odor at all. There seemed to be a great deal of water, but very little solid matter.

The most important thing in connection with these abscess cases is prevention, and I think we make a mistake in allowing bladder inflammations to go on for such a great length of time without resorting to drainage. In many of these cases pyelitis can be relieved by draining the bladder.

THE HEALTH RESORTS AND BATHS OF EUROPE AND NORTH AFRICA.

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II.

INTERMEDIATE CLIMATES (Continued).

ALGIERS.

BEAUTIFUL, wonderful city, lying on the western Mediterranean shores, laved by the deep blue sea, half Eastern, half Western, half Christian and half Mohammedan, with a large number of Spanish, Syrian and Moorish Jews intermingled with those two great classes, Algiers is one of the most interesting, most fascinating historical cities of the world, and presents a most splendid appearance when viewed from the sea. The white houses and glittering towers, rising upwards and backwards, with the bright green background of the orange, eucalyptus and other trees of rich foliage, of the Sahel, is a picture one can never forget, and is difficult to describe.

To every American citizen, Algiers must be intensely interesting, and the Barbary States of which it was the capital. Every American who knows anything of the history of his own country can but remember that Algiers was the first State to make war against the newly formed American republic. No sooner had the United States of America thrown off the yoke of the English king, and his blundering, proud, overbearing, incompetent advisers, and breathed the exhilarating air of glorious independence, than Algiers disturbed the well earned and much needed rest of the young republic by declaring war against it. War. was declared in 1783. Two years later—in 1785—two American vessels were captured in the Atlantic Ocean, and in 1793 eleven more prizes were made. The men on board these ships were all taken to Algiers and sold as slaves, and ten years after the declaration of independence of the United States, there were over 100 American citizens held as slaves by the merciless Algerians. The horrible sufferings of these poor wretches is beyond description. So lately freed from English rule to be sold into a slavery among the worst of tyrants, who knew no pity and respected no laws. The American Minister at Lisbon was ordered by his government to negotiate a peace, the Americans binding themselves to pay $721,000 as ransom for their enslaved compatriots, and partly also a present to the Regency, and it was further agreed that America should pay an annual tribute of $22,000 in munitions of war—and which sum, by the arbitrary system of fixing the values, was generally nearly doubled.

These facts, taken from Sir Lambert Playfair's book on Algeria and Tunis, which I have used for these short historical notes, can but be of great interest to every patriot, and will be useful to recall to the minds of the great, prosperous, smart, rich America of to-day the struggles of the early days of the republic, when only a will of iron and nerves of steel could be trusted with the helm of State to guide the vessel out of these dangerous straits into the clear, deep waters of national wealth, and power, and prosperity. One hundred years ago America had to redeem her sons from Algerian slavery and pay tribute to the infidel to secure a peace—to-day, the States reaching from the Atlantic to the Pacific Coast can laugh the whole world in the face and dictate her will to the nations of the earth.

Such are the results of self-reliance, energy and national self-respect, the building up of a splendid people, the development of a glorious nation, which has spoken more than a quarter of a century ago with a voice of thunder and said that slavery should be no more!!

Algiers is in every sense a very charming place, full of interest to the curiosity hunter, the archæologist, or the pleasure-seeking tourist—its queer mixture of men and women of all nations, in all kinds of remarkable costumes, of all shades of color, from the darkest-skinned African negro to the fairest-skinned Northern German. One may hear as many different languages spoken here in one day as one would hear in Paris in ten years. The streets, too, are as widely different as the people who crowd along them. Here you have a fine, broad street, with attractive shops, and all the evidences and appendages of the highest Western civilization, and in the next minute can be in a narrow Arab street, scarcely wide enough for two people to walk abreast, while from the little Arab cafes or from the native sandal makers' or tailors' shops your ears are assailed by the sound of the Arabic tongue or the wailing, monotonous tones of their extraordinary musical instruments. In the town of Algiers visitors do not reside, except for very short periods. There are several hotels, two of which are most excellently kept. The Hotel de l'Oasis, on the Boulevard National, a really good, clean, first-class hotel, with an excellent restaurant attached to it, and the Hotel de l'Europe, on the same Boulevard. Both these hotels are in every respect comfortable and well managed, with satisfactory sanitary arrangements. Of the other hotels in the town I prefer to say nothing. If people stay for any length of time in the town they are liable to attacks of fever, and the sanitary system is very far from perfect. I always advise patients to remain as short a time as possible in the town, and to live during that time only in one of the good, well-drained hotels. There are a very great many advantages to visitors at Algiers. The steamers of many of the great German and American companies touch here on their way to Naples and Egypt, and visitors can generally find accommodation on board who wish to go on to Naples or the Eastern Mediterranean ports. Many Americans disembark here, and thus leave room for more passengers.

There are express steamers to Marseilles almost every day, making the voyage in from twenty-six to thirty hours. There are railways to Bikra for those who wish to see the desert and its wonderful date palms—to Oran and to many other places of interest. Tunis can also now be reached by rail from Algiers. The many kinds of silk, brass, silver, gold and ivory work to be bought in Algiers is quite amazing. Much of it, however, is not worth possessing, and very much dearer than can be obtained elsewhere. Cheating is of course the rule. Whatever price is asked it is only safe to offer one quarter. They will appeal to God, to their prophet, or (if Jews) to the beard of Abraham or the holy place to bear witness that they are cheating themselves by asking such a low price, but they end by taking a quarter or a third of the price originally asked, and they are very glad to get it too, all the same. The brass *pierced* and *inlaid* work is very beautiful and very cheap. There is a shop kept by Syrian Jews from Damascus, situated near the Cathedral, which is the best. The owners are the most fair dealing men of their class in the town. I cannot give any descriptions of the many beautiful Moorish and Turkish houses, mosques and other buildings of Eastern architecture. They can be found in Murray's Handbook on Algeria, written by that great Arabic scholar and archæologist, Sir Lambert Playfair, H. M. Consul-General at Algiers, but we must pass on to *Mustapha Superior*. This is a suburb of Algiers, situated on the slopes of the hills south of Algiers, two miles from the town, and where are found the villas of residents and the best hotels for visitors. Mustapha Superior is a most healthy and beautiful residential suburb, with splendid views of the sea, and with fresh pure air, being of considerable elevation. The villas are comfortable, the hotels are among the best in the world, and the prices about *half* those of Egyptian hotels. The Hotel Splendid is a very excellent hotel, with marvelous views of sea and mountains. It was formerly a Moorish villa, and has a patio of exceeding beauty, where afternoon tea (in winter) is a fashionable institution, and people meet each other in an informal way. The Hotel St. George is larger, gayer, and arranged with every regard to comfort; the sanitary state is perfect, and the proprietor, who is one of the leading architects of Algeria, has spared no expense to make it in every way a perfect winter home for good class visitors. It is the most fashionable hotel at Mustapha, and is under the management of a clever Swiss director. The Hotel Continental is nearer to the town, and has, perhaps, even finer views—it is also very comfortable. There are several smaller hotels, cheaper, and with average comfort.

There are two or three English medical men practicing at Mustapha, and several French and other physicians besides, but the profession is not as well represented at Algiers as it is on the Riviera and other places. Dr. Thompson is an English physician of experience—he has been for many years at Algiers, and is generally consulted by English and Americans. Dr. Nissen speaks English and is a graduate of Paris. There are also other doctors less well-known. The climate of Algiers is more humid than the Riviera climate; a good deal of rain falls during December, January, February and March. April and May are the loveliest spring months, then with June begins the hot weather, which becomes hotter still in the succeeding months, till the cooler, pleasant weather in the middle of October invites back the sick and feeble to Algeria's shores, if they do not mind frequent very heavy showers of rain which fall in October and November. The season is from Oct. 15th to June 15th. There can be no doubt but that Algiers has a much more humid climate than any Riviera station, but if it has more rain it certainly is free from the terrible mistral, which is the great curse (from the *invalid's* point of view) of Nice and Cannes. Still, the number of wet days in most seasons at Algiers is a great drawback to the place as a winter health resort. Each person assures you that it never rained so much before, that each season is different, that snow almost never falls etc., etc., all of which must be taken "cum grano salis."

There are both Anglican and Presbyterian churches at Mustapha Superior. Society is very good, people generally are exceedingly hospitable and do much to make new comers happy and welcome. The most beautiful villa in the neighborhood is the Chateau Hydra. It is the residence of Mr. E. Ledgard and his charming wife, who, as a leader of society in the neighborhood, is most kind to American and English visitors who are strangers. The Chateau Hydra, with its many historic associations and its matchless old Algerian tiles, may be visited by special permission. Its owner is also the proprietor of the far-famed Chateau Hydra Vineyard, which extends far and around the residence.

One of the most important people to know in Algiers is Mr. Dunlap, 15 Rue d'Isly; he is a banker, butcher, American and English grocer, agent for villas, etc., and is in every way most useful to travelers. Few people get along comfortably without a little help or information from Mr. Dunlap, who gives it unsparingly and gratis. He is, in fact, the servant and friend of every one in the American and English colony.

And now to consider the therapeutic indications of this North African health resort. Of course, it is claimed that Algiers is the place *par excellence* for consumptives, and you hear the same thing in nearly every Mediterranean health resort. Nice, Cannes, Mentone, Hyeres, San Remo, Malaga, Alicante, Tangiers, Naples, Spezia, and a score more places all claim that they have residents who came there to die, but who are now well and strong, but who would surely and certainly have died anywhere else. This is the song they all sing in nearly every health resort in Europe, so that no great reliance can be placed on any such statements. No doubt there are many climates so similar to each other that the choice of one or the other is a mere matter of preference for this or that town, and the choice of a place is determined by social or other reasons, and is not of any importance from a climatic standpoint, there being practically no difference; but, on the other hand, there are many health resorts which are distinctly indicated in certain affections, and for which no other place can be so well chosen. The treatment by climate, or air-cure, of tubercular disease of the lungs is a subject I hope to discuss at greater length at a future time, but I may at once say that nothing is more absurd, nothing shows actual scientific ignorance more than to assert that a patient's life has been saved by residence at one particular place, while had he gone to a similar climate fifty miles away he would most surely have perished. It has, no doubt, become a matter of keen competition between the ever-increasing number of winter health resorts; but as physicians we must not be ready to accept every statement made, even if it has the appearance of being the fact, without careful examination. In Murray's handbook, which I have quoted already, and which is a most valuable work (as a *guide*, written by a masterly hand), I find a quotation from a Dr. Jackson's remarks in his "Medical Climatology." He says that "consumptives in whom there is a deposit of well marked *crude tubercle* may pass one or more winters at Algiers with advantage, under circumstances which afford Nature the most ample leisure to repair the disorganized structure." Apart from the very *doubtful pathology* of these remarks, I can only say that it is precisely what can be said of all the places I have already mentioned, and therefore it is not very clear what special right Algiers has to these remarks, which are merely the truth about them *all.* Algiers is no doubt as well suited to incipient tuberculosis as any other climate of the same kind, and neither better suited or worse suited, but its real advantage over all the climates I have mentioned is in (1) bronchial asthma, (2) bronchitis and (3) emphysema, and for the reason that on the one hand the temperature (as in most humid climates) varies much less than in a dryer atmosphere, and the risk to feeble or elderly people of taking a chill is greatly less, while the air, being charged with a certain degree of moisture, is soothing to the chronically congested and thickened bronchial mucous membrane. I have seen cases of bronchial asthma, cases of emphysema and chronic bronchitis do exceedingly well here—better than anywhere else—and for the reason that the air is not as dry as the air of Nice, and on the other hand the temperature is higher and the air warmer than that of Biarritz, and less humid than Tangiers. Algiers is even of *greater* therapeutic value in *certain nervous* cases also. There are many functional derangements of the *heart* which have until recently been ill understood, but which we begin to look upon as due to some defect or disturbance or derangement of its *innervation*—there occur periods of unaccountable palpitation, fainting or pain, *resembling* angina pectoris—(not the true disease of course) or again, the heart action apparently suddenly fails, or the pulse rate is greatly quickened; auscultation and the sphygmograph gives no indication of any organic mischief. In these cases Algiers is a place of the *first importance;* the heart action becomes regular, and the abnormal symptoms pass away rapidly.

Another class of nervous malady for which I place Algiers in the first rank is hypochondriasis *with restlessness.* For simple hypochondriasis with *depression,* Naples is preferable; but for restless hypochondriasis Algiers is a real blessing: Patients lose their fidgety tendencies and settle down into a quiet, easy state, and the spirits and general bodily and mental tone is raised, the digestion improved, and sleep is sound and good. Algiers then is of the first importance for:

1st—Bronchitis, emphysema, bronchial asthma.

2nd—Various functional heart affections which I have already described.

3d—For hypochondriasis of a restless type.

It is of secondary importance in other nervous affections, while for rheumatism, gout and digestive or kidney affections, better climates than Algiers can be found for them, as we shall discover in future articles.

THE TREATMENT OF CYSTITIS IN WOMEN.

By E. M. Hale, M. D., Chicago.

A RECENT article in the New York Medical Times by Dr. W. T. Parker with the above title, is before me.

At the onset I will say that my experience has been exactly the reverse of Dr. Parker's. I have never had good success in curing chronic cystitis in women by means of local irrigation. In men my success has been better with irrigation than with women. I can only explain this by the fact that, owing to stricture, enlarged prostate and other obstructions, it is more difficult for men to empty the bladder. What astonishes me is the assertion by Dr. Parker that "cantharides, cubebs, copaiva, balsam Peru, oil of turpentine, sandal wood, benzoic acid, buchu and such remedies I have discarded as worse than useless."

I do not know in what doses Dr. Parker has used these drugs, but I can truthfully declare that with these very remedies and similar ones, I have during a practice of forty years cured hundreds of cases of acute and chronic cystitis in women. My method in selecting drugs is according to the law of similars. All the above will cause acute and chronic cystitis. In acute cases, where the symptoms of the patient call for, say, cantharis, I prescribe it in the 3-10 to 6-10 attenuation. In this stage the discharge from the mucous surfaces of the bladder is thin, transparent, like diluted white of egg, and the pains denote intense congestion and hyperæthesia.

When the inflammation becomes chronic, and the discharge becomes thick, tenacious and offensive, then the appropriate remedy should be given in larger doses, even the tincture or decoction. One reason for this is that the extreme sensitiveness of the mucous surfaces is much less than in acute cases, and requires a greater quantity to make a curative impression upon it.

Another reason is that chronic cystitis is a *secondary* effect of the above named drugs, and all secondary symptoms and pathological states require larger doses than do acute conditions. Still another reason is that no drug can cure disease of the mucous membrane of the bladder and urethra, unless it is eliminated through the kidneys and saturates the urine. This is the explanation why hydrastis or geranium are of no value internally. They are not eliminated by the kidneys. I have on several occasions proved the truth of this assertion by curing gonorrhœal ophthalmia with aqua copaiviæ, and curing gonorrhœa by injecting it into the urethra.

It may interest the readers of the Times if I mention the drugs which in my practice have brought about the best results in catarrh of the bladder:

Cantharis, cannabis saliva, equisetum and corn silk I prefer in the acute stage; the latter acts best when given in doses of 10 or 15 drops of the fluid extract, because it is primarily a sedative to the mucous surfaces of the urinary organs. In chronic cases I have found chimaphila the most generally useful of all the drugs I have used.

With it I have cured cases which had resisted the most vigorous internal and local treatment—cases where the muco-purulent, offensive sediment formed 30 per cent. of the whole volume of the output from the kidneys. It acts best in 10 to 20 gtts. of the fluid extract. The next most important remedy is eucalyptus, but in order to get its best effects it must be given in doses of 5 to 10 drops every three or four hours.

It has been found that both species of chimaphila contains arbutin—a glucoside also obtained from uva ursi (bear-berry). This glucoside appears in long, colorless brilliant needles, soluble in cold water, 1 part to 8; in alcohol 1 to 16. It is a powerful antiseptic, its effect being due to the hydrochinone which is set free in the organism.

Dr. Borisburg, of St. Petersburg, who has experimented largely with arbutin, says it "has a decided diuretic effect, due to the stimulation of the epithelium of the malphigian bodies and urinary tubules, and to increase the circulation of the blood through the kidneys. It exercises a distinct antiseptic influence in lessening the formation of pus, in cases of purulent inflammation of the bladder and kidneys." It has been used successfully in renal hemorrhage. Beside chimaphila and uva ursi, mitchella, ledum, callura, vaccinium (several species) pyrola, gaultherna and gaylussacia and epigovea repens all contain arbutin, or an analogous glucoside. They are all sedatives to the urinary tract, all antiseptic, and have all been found curative in chronic catarrh of the bladder. The doses of arbutin vary from 5 to 60 grains daily. I would advise 10 grains of the 1–10 trituration to begin with. If no improvement appeared in two or three days the dose can be gradually raised to 5 grains of the crude, three or four times a day.

Prof. Schroff, in *Pharmacologie*, states that he observed no diuretic effects from pere arbutin 7½ grains, while Dr. Hughes found ursin, which is identical with arbutin except that it contains gallic acid, to possess diuretic properties (all the above plants contain tannin or gallic acid). This observation leads me to assert that we must not expect to obtain all the characteristic effects of any drug by giving its "active principle," whether it be a resinoid, alkaloid or glucoside, or all combined. There are other constituents which go to make up the individuality of the plant. I believe a carefully prepared, powdered solid extract, which ought to contain all the constituents of the plant, will be found to be the best preparation.

Hydrangea seems to resemble closely the drugs which contain arbutin, as well as another class, among which are cornsilk, triticum repens and galium. Hydrangea was held in high repute among the people, in domestic practice, as a remedy in gravel, dysuria and other disorders of like nature, before it was used by physicians. I have found it of great value in gravel, both uric acid and phosphatic; in renal colic, irritable bladder, chronic cystitis; but I am not sure that it influences the muco-purulent discharge as does chimaphila. It is singular that so little has been written about this remedy since King mentioned it in his Dispensary in 1860. He says it was introduced to the profession by Dr. S. W. Butler, of Burlington, N. J., as a remedy for the removal of calculus or gravelly deposits in the bladder, and for the relief of the excruciating pain attendant on the passage of calculi through the ureter.

It must have some considerable medicinal action on the general system, for King says: "If taken in overdoses it will produce some unpleasant symptoms, as dizziness in the head, oppression of the chest, etc." I wish the "etc." symptoms had been given. King asserts its value in "alkaline urine, chronic gleet and mucous irritations of the bladder in aged persons." Dose the same as chimaphila.

There are cases where neither chimaphila or eucalyptus will remove the putrefaction going on in the mucus of the bladder. In such cases boracic acid, saccharin, or salol are indispensable.

Copaiva, cubebs, oil of sandalwood, pichi, uva ursi, benzoate of lithia and creosote have been useful in my practice.

I advise my patients to drink freely of soft spring or rain water, Poland water or Lithia water. There is no objection to tea, weak coffee, cocoa or lemonade. Mate, a tea much used in South America, and now imported into our large cities, is an excellent beverage in such cases. It is sedative to the urinary passages. I insist on all wool undergarments, and the wearing of high shoes or boots to keep the feet warm and dry.

PSYCHOLOGICAL FEATURES OF THE HANNIGAN AND AUB CASES.

By Hon. Abram H. Dailey, Brooklyn, N. Y.

YOUR request for contributions upon the psychological features of the lamentable Aub-Langerman case is timely, and thoughtful responses will vastly aid in throwing light upon a subject of which so little is known. Nothing but continuous effort can awaken deserved attention to psychology and kindred subjects; in fact their respectful consideration has been enforced. Even now, the hypnotic power and the possibilities of the psychical part of the being we denominate man is so little understood, that thousands who plume themselves upon their intellectual attainments are not only unconscious of their own powers, but stupidly deny their existence in any.

In the recent case of Hannigan, acquitted of murder on the ground of insanity, the many very able medical experts saw in the prisoner a sensitive, nervous organization, one likely to be greatly wrought upon by the shocking calamity which had befallen a much loved sister. They saw that a wrong which had produced such disastrous results was constantly in his mind, inseparably connected with her death. The natural tendency of the human mind is to lead the body whose actions it controls, to wreak vengeance upon the person of the man who had done so great a wrong as Hannigan felt had been inflicted by the betrayer of his sister. For him to dwell upon such an occurrence was almost certain to blot out a realization of the enormity of the act he was about to commit, and to set into irresistible action those mental forces which would compass the death of her betrayer. Predicating their opinions, at least in part upon these considerations, they could conscientiously testify that at the time of the homicide Hannigan was so far mentally unbalanced as to not be conscious of the nature of his act, or to realize that he was doing wrong. The impulse to slay was irresistible, uncontrollable. Here was a cause for the production of the mental condition of the prisoner, and he had permitted himself to dwell upon that cause and its terrible features until he lost his better reason, and could not control his action. Here, to my mind, the medical experts were clearly right, but note, would either of them to-day testify that Hannigan is still so insane that he should not be permitted to be at large? I doubt it. Yet the judge has properly committed him to a retreat until pronounced sane.

Is insanity the proper term to apply to such cases? Is it possible for the mind to be diseased? In fact, is it not the derangement of the base of all mental action, by the treatment to which it has been subjected, that occasions all the trouble? If Hannigan knew this would be the result, and could have controlled his mental condition at first and did not, then another question of responsibility would have been presented. If a man knows that the doing of certain things dethrones his reason, and still does them, shall or shall not he be held responsible for what he does in such unreasoning condition? The law will not accept drunkenness, voluntarily produced, as an excuse for crime. No man is justified in indulging in the contemplation of crime, or in doing anything that he has reason to believe will lead him to do an act which, if done in a sane moment, would be a crime. Our laws should be adequate to punish all offenders. Insanity, pleaded in avoidance of responsibility, should be clearly proved.

What is unconscious cerebration? How many understand the various factors involved in that energy we call mind? Is it composed of parts so interwoven that none work independently of the other? Or can some be destroyed and the remainder properly perform all the functions as before, as can one of the organs of sight after the destruction of the other? Is there any positive knowledge upon the subject? Improper use of limb or muscle tends to paralysis; so of the brain. Injudicious cerebration tends to paralysis or more less complete, and this produces erroneous mental action.

But these are well marked cases of insanity. They do not recover the moment a purpose is accomplished. Hannigan attempted to shoot Mann weeks before he accomplished the act. A proper restraint and treatment would have changed the tendency of his mind.

The Aub-Langerman case presents an instance where a different result is reached by the tendency of certain mental operations. I see nothing, and have seen nothing, considering all the facts, to justify a verdict of rape against Langerman. Miss Aub "is frailty" personified. If she was virtuous when she went to the apartments of Langerman, it seems clear that either passion or the desire of gain, perhaps both, were powerful agencies in inducing her to yield to his advances. I see nothing to indicate that Langerman exerted any intentional hypnotic influence over her. To set in operation the hypnotic agency so that it shall control the will of another, and produce sleep, usually requires a concentration of the attention of the subject, and, certainly, in such a case, a willingness on her part would be required to be placed under its influence. The circumstances, all taken into consideration show, to discriminating minds, that the exercise of any such power was not requisite, nor was it resorted to. She is emotional, and of feeble will, and readily yields to a positive mind. She is comparatively devoid of stability of purpose. She naturally had some apprehensions as to the result of her intercourse with Langerman. She sought the examination of a physician to determine her condition. This was a natural, rational act. She went back to him without knowing what was her condition, to learn if he would protect her if she required it, and was repulsed when she asked him for assistance. Then she planned to get the advice of her friend, and to avoid disgrace, by charging rape against Langerman. She had not the moral character to resist the approaches of Langerman, nor had she power to resist the influence of Miss Smedley in urging his arrest. She had the cunning to supplement her statement by appearances prepared by herself. It only required a little persistent lying to gain the credence of many persons, including the jury. What followed the conviction of Langerman, now becomes a matter of special interest. She told the Recorder that she dwelt upon her story so long and so determined that she came to believe it herself. Is this true? Can it be that she could persuade herself to believe a lie? Can such a paradox obtain as that she could persuade herself to believe what she knew to be false? The antiquity of authority to that effect will not be respected without we go further, and find that the mind has become unconscious of the real and believes in the imaginary. Then it is not normal, it is unsound. I fully recognize that a psychopath may easily be so hypnotized as to believe in the unreal. There is no probability whatever that Miss Aub has at any time been in that condition. She has acted perfectly rational, but has been swayed to a remarkable degree by influences around her. There is vastly more to indicate that her confession is true, than there is that her testimony against Langerman is. When she had accused Langerman to her friend, and she had insisted upon her complaining of his assault before the magistrate, she was too weak in moral force to resist. She knew she was about to do a great wrong. She had lied, and to be consistent, must keep on lying, and she did. She was there surrounded by the moral and mental forces of her friends, all directed to one purpose, and that, the conviction of Langerman and avenging her supposed wrong. When that was accomplished, all those influences relaxed. While this was going on, she was fully conscious that her story was false, and when left to herself, the consciousness of the wrong she had done haunted her. She was in the Door of Hope, with every influence at work to deepen the conviction. She dwelt upon her sin, and there was none to share her thoughts unless it was God, while the prayers of Mrs. Whittemore and others, the reading of the Bible, the thoughts of the punishment to which she believed she would be subjected by the will of her offended God, the way of escape by confess-ing her sin to her Saviour, and the necessity of her coming to Him in repentance, were all constantly urged upon her by the religious zealots who had her in charge, who were ignorant of the real cause of her distress. Her agony was great. Little by little she began to yield, and to open the way to the confession which was to follow. She began to tell how wicked she had been ; but she could not expect forgiveness without undoing the wrong which, in her then mental condition, was haunting her soul.

"May one be pardoned and retain the offence?" Turn which way she would, under the influences then working upon her, she saw no way of escape from perdition except to undo her wrong, and that could only be done by a confession. But confession, if it released Langerman, might and probably would put her in his place. But what of that? What were a few years in prison here to an eternity of torments? At last she could stand the strain no longer, and astonished her zealous Christian friends by the confession, as the outcome of their work. It was something they had not contemplated. Before she could cool off, they had her before the Recorder, and she confessed to him that her testimony as to being raped was false. She then, for the first time, made a statement that is consistent with the known facts of the case.

At this point, we must not omit comment upon another noticeable feature of this remarkable case. The Recorder himself has given from the bench, very conclusive evidence that he is sensitive, and was affected and swayed by invisible influences. What was it that haunted him? What was that spirit of which he speaks which so oppressed him that he could not rest? Were there invisible intelligences who were aware of the truth, who approached the Recorder in his calmer moments, and impressed him with the consciousness that he had been an instrument aiding in the miscarriage of justice? I will leave these questions with the language used by the Recorder himself, for others to answer. I do not think him deserving of too severe criticism. He desired to do right. He was impetuous and indiscreet. That is all.

The subsequent retraction of Miss Aub is in harmony with her entire conduct. So long as the influence of Mrs. Whittemore and Miss Kellard, the reading of her Bible and prayers continued, she adhered to the truth. During this time she refused to see her aunts and Miss Smedley. But a few days of comparative solitude weakened the hold of those influences upon her. Her religious fervor began to cool. The prospect of years of confinement immediately before her began to create terrible thoughts, and she very naturally concluded that in her then position a good lawyer would be more serviceable than God. The opportune coming of her aunts, and the influence of their presence, leaving out of consideration all they may have urged, broke the hold of what Mrs. Whittemore denominates the influence of God upon the unfortunate girl, and she now retracted her confession to lie herself out of trouble. Langerman is free, and her conscience does not torment her. She has spoken of too much which occurred connected with her confession to be believed when she claims that she is unconscious of what she said to the Recorder.

People who waken from trances invariably resume consciousness as of the point of time and circumstance when they went into them. Miss Aub is a dangerous woman, but more to be pitied than blamed. I do not think she will become insane. She has not the tenacity of purpose to become an enthusiast, and her reason, though subject to temporary perversion, will not be easily dethroned.

A STUDY OF SOME DRUGS IN SO-CALLED DERANGEMENT OF SEXUAL FUNCTION.

By BUKK G. CARLETON, M. D., NEW YORK.

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THE symptomatic indications in this paper have been verified either by the author or by other competent observers; and while many more drugs could be added and will be required according to the individual case and indications, this paper has been restricted to those more commonly used.

Neither is reference made to the frequently required surgical procedures, such as the removal of strictures in various locations of the genito-urinary tract, deep urethral injections, the application of heat or cold through the urethral or rectal psychophore, the milking of the seminal vesicles, etc., as required by the pathological cause, and the discovery and correction of unnatural habits where they exist, the institution of proper hygiene, and such other measures as may be necessary to complete the cure.

Many of these cases are lightly treated by the general practitioner, and many useful members of society are allowed annually to drift into a worse condition, who might easily be cured by the adminstration of properly indicated remedies early in their history, even without the aid of a specialist and the necessity for the careful and scientific local treatment which finally becomes *de rigueur* to restore their moral tone and health. Our study of drugs includes the following:

Acid Phosphoric.—Special indications: In cases where for a long period there has been an excessive loss of seminal fluid, voluntary, involuntary, nocturnal or diurnal, when straining at stool, or urinating; penis and scrotum relaxed; testicles hang low down; general crawling sensation over the scrotum; erection difficult or impossible. When coitus is attempted ejaculation occurs too early in the act.

General indications: Whole system generally relaxed without marked local pain; burning sensations in lumbar region; back and legs weak; totters when walking; vertigo, as if about to fall; when reclining, sensation as if the feet would go higher than the head; crushing pain in the vertex, accompanied by cold, clammy perspiration late in the afternoon and evening; stupefacation or sensation as if intoxicated; low-spirited, indifference, sadness, disinclined to talk; eyes glassy and lustreless.

Acid Picric.—Special indications: Priapism; violent erections; penis distended almost to bursting; agonizing desire for an embrace. (It is reported that many of the provers were compelled to leave lectures and return to their homes for a few days.) Seminal emissions, followed by hot feeling in the dorsal and lumbar regions, worse from motion; tired aching feeling in the lumbar region on awakening, with heaviness in the feet and lower extremities, and accompanied by a heavy, tired feeling in the occiput, forehead, or both.

General indications: The least mental exertion causes prostration and brain fag; vertigo on walking, stooping or going up stairs; numbness, crawling and pricking in the limbs; rapid development of boils over all parts of the body.

Agnus Castus.—Special indications: Impotence; organs relaxed and cold, nothing excites an erection; emission of mucus from the urethra during sexual excitement; involuntary emissions during the night, even after coitus; seminal fluid watery or yellow.

General indications: This remedy is especially useful in those advanced in years, who in their youth have carried sexual indulgence to extremes, and who, while physically impotent, are mentally as excitable in mental passion and excitability as in early life, thus leading to many perverted acts and orgies; low spirited; melancholy; fear of approaching death; loss of memory; heaviness and pressure in the head as if it would fall forward; pain in the vertex and great debility; sleeplessness, though very tired when retiring; sleeps but little during the night.

Baryta Carb.—Special indications: Diminished sexual power and desire.

General indications: Useful in the aged, where there is great weakness of mind and body; want of confidence in others; vertigo; trembling when standing, with fear of falling; feeling of heaviness in the body; general emaciation; sensitiveness to cold; all symptoms aggravated when thinking of them.

Caladium.—Special indications: Glans penis is flabby and relaxed, the result of masturbation; want of tone in the organs; when the foreskin is retracted there is not sufficient reaction or contractibility of the parts to replace themselves, or, as seen after coitus, the prepuce remains behind the glans and becomes swollen and painful; relaxation of the penis during sexual excitement and desire; erection suddenly ceases during coitus, without cognizance as to whether there was an ejaculation of semen; no orgasm; parts flabby; imperfect erection, with premature orgasm; nocturnal emissions, with or without lascivious dreams, or with dreams in no way associated with sexual subjects; complete impotence without erections; genital organs cold to the touch and sensation.

Nymphomania, produced by seat worms from the rectum entering the vagina, thus causing irritation and unnatural sensations.

General indications: Low spirited, gloomy, forgetful; attacks of faintness after writing or mental exertion; disinclination to move or act; lewd thoughts without erections.

Calc. Carb.—Special indications: Sexual power diminished or imperfect; emissions premature; great prostration after coition, followed by weakness and trembling, especially in the knees, with headache, vertigo and night sweats; impotence, with increased sexual desire; burning and stinging while the semen is ejaculated during coitus; frequent nocturnal emissions.

General indications: Frequently required for those who have led a rapid and unchaste life, and having settled down to a moral and healthful condition, suffer from excessive sexual desire and physical deficiency; more passion than physical power to carry out the act; in all conditions caused by sexual excesses; weakness of mind and body; apprehension and anxiety about health; fear they will lose their reason, or others will notice their confusion of mind; despair; mental application difficult; nervous relaxation, ill humor, faintness, great debility and emaciation, with prominence of the abdomen and good appetite; dark circles around the eyes; palpitation of the heart; perspiration of the hands and feet; coldness of and dead feeling in the feet, especially at night.

Cantharides.—Special indications: Priapism; satyriasis; spermatorrhœa resulting from gonorrhœa; nymphomania; great increase of sexual appetite, which is sometimes uncontrollable; erections violent and sometimes painful; erections continuous without sensation; urethral irritation, with priapism and constant desire to urinate.

General indications: Amorous frenzy; unchaste actions; shamelessness; eyes fiery, sparkling and protuding; over-sensitiveness of all parts of the body

Capsicum Annum.—Special indications: Violent erections occurring during the day and relieved only by the application of cold water. Violent erections in the morning. Trembling of the whole body during sexual excitement. Loss of sexual power; coldness of the genitals, accompanied by cold chills down the back.

General indications: Vertigo; pressive headache, darting pains through the head, worse when at rest; peevish and sleepless.

China Off.—Special indications: Morbid excitability, with lascivious fancies; emissions caused by slight abdominal irritation; premature ejaculations; followed by great weakness; frequen nocturnal emissions after self-abuse.

General indications: It is very useful for the weakness immediately following a sexual debauch, or when several emissions have occurred during the previous night, with nervous irritability and desire to be alone; indifference; pain in the small of the back when lying upon it; weakness of the knees; trembling of the hands, etc.

Chlorine.—Special indications: Impotence of recent appearance, with aversion to sexual intercourse.

General indications: Fear of impending danger; fears loss of reason; forgets names and places; disinclination to arise in the morning, accompanied by ill-humor; loss of flesh; aged appearance.

Conium Mac.—Special indications: Impotence; imperfect erections; excessive seminal emissions resulting from sexual excesses or celibacy; seminal weakness, with erethism and premature emissions; flaccidity of the parts, with weakness in the back; emissions without erection; discharge of prostatic or other fluid from the urethra during stool and with every emotion; sexual organs very irritable.

General indications: Hypochondriacal; morose; avoids society; sad, anxious and low-spirited; vertigo, worse on turning in bed; difficulty in walking; numb feeling in the brain; especially indicated in complaints from denial of carnal desires.

Cobalt.—Special indications: Frequent seminal emissions, which awaken from a lewd dream and accompanied by headache. Voluntary and involuntary emissions are followed by backache, referred especially to the lumbar region, and which is aggravated when sitting.

Digitalis.—Special indications: Violent erections; involutary seminal emissions without dreams, followed by great prostration, sadness and utter despair.

General indications: Gloomy; peevish; great anxiety and apprehension about the future; dullness in the head, with a limited power of application; attacks of debility and faintness especially after breakfast and dinner; great nervous weakness.

Dioscorea. — Special indications: Sexual organs relaxed and cold, with great weakness of the parts; seminal emissions frequent, sometimes two or three times nightly, accompanied by erotic dreams, followed by weakness, especially about the knees, and possibly pain and spasm of the spermatic cord.

Gelsemium. — Special indications: Sexual organs relaxed, cold, and often accompanied by cold perspiration on the scrotum; frequent nocturnal pollutions without lascivious dreams; spermatorrhœa; emissions followed by languor; Impotence with weakness and irritability of the seminal vesicles from masturbation.

General indications: Vertigo, accompanied by pain in the occipital region; irritability and languor.

Graphites.—Special indications: Violent erections, with uncontrollable sexual desire and excitement; during coitus cramps in the calves of the legs; no ejaculation follows the sexual act in spite of every exertion; impotence; absence of sensation during coitus, and no discharge of semen.

General indications: Melancholy; inclined to grief; fear of approaching danger; forgetfulness; on awakening semi-lateral headache; fear of insanity; sexual thoughts fill the mind, to the exclusion of all others, with voluptuous irritability of the sexual organs; emaciation, with feeling of great debility; unhealthy condition of the skin.

Kali Brom.—Special indications: Erections normal in quality, but persistent; nocturnal emissions; loss of sexual power, with wasting of the organs; nightly emissions, with great nervous irritability.

General indications: Nervous condition from continence; mental depression, with weakness in the lower extremities after sexual abuse or imperfect intercourse; great nervous excitability.

Kali Iod.—General indications: Sterility from specific disease.

Lycopodium.—Special indications: Erections imperfect or absent; organs cold, small, relaxed and shriveled; sexual thoughts cause no erection, though these may be persistent.

General indications: Low spirited, melancholy, despondent, dreads the company of men, desires to be alone; general prostration and emaciation; gastric disorders; faintness at certain hours of the day.

Natr. Phos.—Special indications: Pollutions nightly, with or without erethism or lascivious dreams, but followed by weakness in the back; trembling of the knees, as if they would give way.

Nux Vomica.—Special indications: Involuntary emissions, occurring mostly towards morning, followed by headache and difficulty in walking; seminal emissions are frequent; satyriasis in those addicted to alcohol.

General indications: Especially useful in derangements resulting from self-abuse or excesses at an early age; nervous depression; irritability; over-sensitiveness to external impressions; inclined to fault-finding; habitual maliciousness; debility of the nervous system; sensation of heaviness of the body, alternating with lightness; aversion to motion in the open air; attacks of faintness; gastric and bilious disturbances; congestion of the abdominal organs.

Phosphorus.—Special indications: Uncontrollable sexual desire in both sexes. Frequent emissions, with great feebleness, loss of strength and flesh; abnormal sexual appetite and excitability, with burning, tingling and formication along the spine; erotomania; great sexual excitement; revealing the person without shame and seek to gratify debased appetites without regard to time or place; sexual mania; constant torment for an embrace, followed by impotence; discharge of seminal fluid during stool; nightly emissions, with great prostration.

General indications: This remedy will be indicated not only in satyriasis and nymphomania, but is required in impotence and other sexual disorders which have resulted from overexcitability or abuse of the genital organs. Impotence from chastity is frequently cured by this remedy. This drug is also indicated in those who have lived a rapid life and are trying to restrain their passions, and are unable to do so from local erethism, etc. Great excitability; vehement; becomes easily vexed and angered; never wants to be left alone in a room; mental application difficult, cannot think, easily fatigued; vertigo on arising in the morning or on rising from a seat; dull pain in the head; trembling on beginning to walk; tired feeling; difficulty in walking; heaviness of the back and limbs; locomotor ataxia from sexual excesses.

Platina.—Special indications: Sexual desire inordinately increased, with violent erections, especially at night; excessive sensitiveness and titilation in and upon the genital organs, with an almost uncontrollable desire for an embrace; satyriasis or nymphomania; sexual desire and strength abnormal; ovaries are sensitive to pressure, and the seat of a burning pain.

General indications: Spasms and convulsions, from abuse of the sexual organs previous to puberty. The uterus may be prolapsed and indurated, accompanied by spasms of the parts and bearing-down pain; spasms and rigidity of the parts, attended with dyspnœa.

General indications: The mental symptoms are characterized by haughtiness, egotism and a feeling of self-superiority; looks upon every one as being inferior; objects appear smaller than normal; home associations appear strange to them; sees horrid objects, demons, ghosts, etc.; great excitability of the nervous system; hysterical conditions, crying and laughing at inopportune times and places.

In boys this drug is frequently required where they have masturbated to excess before puberty, resulting in hollow eyes, yellow skin, melancholy and sheepishness; tendency to spasms and epileptiform seizures; consciousness not often lost; the limbs are drawn up and separated.

Selenium.—Special indications: Seminal and physical weakness; pollutions, voluntary, involuntary, nocturnal or diurnal, are followed by great nervous prostration; coldness and relaxation of the genital organs, with involuntary discharge or constant dribbling of spermatic or prostatic fluid during sleep, at stool, when urinating, etc.

General indications: General relaxation of the system, all conditions worse after sleep and from mental or physical exertion; easily fatigued; irritability; headache, sleeplessness and mental confusion; paralytic weakness of the spine.

Staphisagria.—Special indications: Prostatic irritation and posterior urethretis, the result of unnatural or perverted thoughts or habits.

General indications: This drug is frequently indicated for the results of perverted sexual habits and the dwelling of the mind upon these subjects, more than the result of any excessive sexual intercourse. These conditions are frequently accompanied in the male by prostatic irritation or posterior urethretis. In the female, masturbation and abnormal sexual habits and thoughts frequently cause ovarian irritation, when they become over-sensitive and easily angered; in these cases this remedy is frequently of untold value, as well as for those nervous derangements in highly nervous women, when continence is enforced by long absence of the husband, or widowhood, or from reading and pondering on impure literature; nervous system worn out; weakened and undermined condition of brain and spinal cord, caused by perverted sexual habits, or the result of a mental state which has allowed the mind to dwell too much on sexual thoughts; gloomy; apathetic condition; shy, peevish, apathetic; prefers solitude, and avoids the company of the opposite sex; the face appears shrunken; eyes listless, deep-set and hollow, surrounded with dark rings; nose pointed; great emaciation.

This remed y is characterized by constant suspicion. Chip on the shoulder waiting for some one to knock it off.

Stramonium.—Nymphomania appearing before the menses; ladies who are naturally refined and modest become exceedingly lewd in speech and action, and insolent in manner; strong odor of the body.

Sulphur.—Special indications: Genital organs relaxed; testicles and scrotum hang down; penis cold; erections infrequent; involuntary discharge of spermatic fluid, with burning in the urethra; if coitus is attempted the ejaculation occurs too early, almost at the first contact of the parts, and before intromission; nocturnal pollutions frequent; discharge of prostatic fluid after micturition; seminal fluid thin, watery and almost inodorous. In the female, pruritus and general congestion of the entire genitalia.

General indications: Useful for the bad results following sexual excesses; hypochondriacal faintness; low-spirited; peevishness; irritability; difficult thought and speech; heat on top of head; cold feet; backache; weakness in the lower extremities; unable to digest milk or farinaceous food.

NERVE AND DRUG AFFINITIES.

By J. A. Carmichael, M. D., New York.

THE argument we have submitted in relation to the toxic or atoxic action of one or more of the constituent elements of ergot upon the substantia gelatinosa of gray nervous matter as contained in the initial ganglion, the opthalmic, of the ganglionic chain of the great sympathetic, is equally applicable, not only to all the parts of the organism supplied by that subtile nerve force, but to the nervous matter that serves and maintains the grosser functional operation o the body, such as those of ordinary sensation, motion, etc. It will be remembered that among the chronic effects of ergotism, we enumerated many convulsive results, in many instances assuming tetanic violence. This points to the intrinsic affinity of the drug, or to one or the other of its constituent elements, with the motor columns of the spinal cord and their myelline substance and that of their afferent nerves. We have already cited authority that signalizes the action of the drug upon the heart and its circulating forces, as the most prominent of the many drug effects of ergot. There is only one way, as seems to us, of accounting for these cardiac impressions, but it is not so easy to define the *quo modo* by which they are produced, any more than it is to explain the mysterious inhibitory action of that other great controlling cardiac drug force, aconite, that demands from the whole system of circulation obedience to its restraining power, and soon brings back the bounding pulse to its normal rhythmic beat, calming and subduing fever, soothing pain, and arresting the destructive processes of inflammation, congestion, etc. We have said that there was one way of accounting for the cardiac effects of ergot, and that way is through its nerve and drug affinities. The great central organ of circulation, the heart, is bounteously supplied with nerve force of every kind, and there is every reason why this should be so. It is not only that the great organ of circulation must be animated by the most intense vitality, but it must be kept in perpetual and unintermitting sympathy with the other vital portions of the body, giving and receiving, one from the other, the power possessed by each, in order to keep alive that mysterious principle which we call life. What are its sources of nervous supply, and whence do they come? The muscular structure of the heart, from end to end, is tesselated with ganglia, and interlaced and enmeshed by their antennæ, and other nerve fibrillæ, delicate as the penicillated threads of a spider's web, uniting with each other to form plexuses, and so helping to maintain the nervous continuity to which we have so often called attention hitherto, and which is embraced in the organic law as defined by one of the ablest anatomists and physiologists of the earlier periods of anatomical and physiological history—Cruveilhier—in the comprehensive words "La continuite, est la loi du système nerveux"—continuity is the law of the nervous system. We have used the word plexus. What is a plexus? Its simple meaning is a knot, and it is a curious anatomo-physiological fact, that, look where we may in the physical structure of the body, and especially wherever there is a generous distribution of nerve force for the accomplishment of complex vital function, there must have been somewhere an approximation, union or coalition of the various nerves before they part for their various destinations, and the nerve force which they convey is permitted to be dispensed. Another curious fact is taught us by anatomy, viz., that in a plexus, a nerve will separate one of its component fibrillæ from itself, dispatch it seemingly upon a special mission, so to speak; cause it to insinuate itself into the sheath of a neighboring nerve and go along with it to its ultimate distribution. What does this mean? To our mind it means that every fibrilla of a nerve conveys a power, it may be common motor, more delicate sensory or intensely vital special force, and that the approximation, union or coalition above spoken of, means enlargement and aggrandizement of the nerve force, whatever that may be.

A prominent illustration of this is seen in the formation of the brachial and other plexuses; not only so, but if we recall the fact that before the great expressional nerve of the face, its sensory portion, passes to its destination, it must previously have received ganglionic intensity, which it does from the point at which the trigeminus merges itself in the ganglion of Gasser. From that moment it is endowed with the inspiration, so to speak, of facial expression, and when we speak of facial expression we open the pages of a volume, whereon are written, so that all may read, the thoughts, passions, emotions and impulses that agitate the mind, and impel to the performance of good or evil, and that are of inestimable value to the physician, pointing to disease obscurely hidden somewhere. Nor must we forget in the consummation of the forces of expression that other power contributed by the portio dura of the seventh pair, the facial nerve, which though motor and of grosser nature, must commingle its force with the other and more subtle power, the sensory, to complete and manifest the phenomena of facial expression. So it is with the nervous distribution to the heart, but in greater and more complex form.

We have said that the central organ of circulation must be kept in uninterrupted sympathy with the other vital portions of the body, and here is the bond of union. We need only to recall the contributions from the nervous sources supplied by pneumogastric spinal accessory, the cardiac ganglia of the great fountain of vital energy, the great sympathetic and through other nervous association with spinal cord, medulla oblongata, cerebral and cerebellar ganglia, to understand why it is that a drug of forceful energy, like that under consideration, and with its affinities with nervous matter generally, and its specific and inexplicable affinities with the certain nervous matter that supplies certain organs of the body, we say, to understand why such a drug can exercise an inhibitory and controlling restraint upon the circulation of the blood, upon the vessels containing and dispensing it, and by such inhibition can determine such results as must ensue from the stasis produced by its vaso-stator influences. This brings us to the investigation of the last of the toxic powers of our drug that we propose to consider, viz.: Its power to determine gangrene.

According to Kobert and others, the element of ergot that contains the most toxic properties of the drug is that which has been denominated sphacelinic acid, because of its qualities that are capable of working such destruction of living parts as to insure gangrene and their consequent death. In this respect the appropriateness of the name sphacelus or sphacelinic, as applied to the acid, is of itself suggestive of the deadly results of its morbific power. Of course, in order to bring about such destruction, the toxine contained in the acid must be exercised in its fullest measure, and the subject of the poisoning be overwhelmed by its intensity.

As to the *quo modo* by which such results are effected, we know of no influence to account for it, except that to be found in the unquestionable law of nerve and drug affinity. That being so, then the devastation seen in ergotinic gangrene must owe its existence to the toxic action of sphacelinic acid upon the nervous matter supplying the soft parts, upon the circulation of the blood, by inducing toxic paralysis of the nervi vasorum—nervo stator; and of the vasa vasorum—vaso stator—by the deprivation of trophic pabulum. By the forgoing suggestions, we have endeavored to interpret the toxic effects of our drug, as manifested in different parts of the human organism, and enough has been said to establish its diverse and manifold operations upon the organism at large, and also its specific action upon certain organs, quickening their functional energies, and, as in the case of the uterus, rescuing and restoring human life, and re-establishing it in its full vigor and vitality. This brings us to the consideration of our second proposition, viz.: How do the toxic manifestations of ergotin and its associate principles stand in relation to the law of similars? In pursuance of our argument, we have pinned our faith upon the unalterable law of nerve and drug affinity. No less fixed and unshakeable is our conviction of the truth of the law of similars, that like cures like, or, as commonly interpreted, that a drug that can arouse in the healthy body certain morbid symptoms, will cure that same body when it shall have become afflicted by a disease manifesting itself by the same morbid symptoms. The distinguished medical philosopher and exponent of this law of cure gave to it a distinctive appellation, and we venture to declare that the word Homœopathy has set more people by the ears than any other "casus belli" that has caused the cutting of throats, and the other *pleasantries* of civil and religious strife, since the Trojan war. The very name begets a fever that resists even its own law and principle of cure, and can be allayed only by its own utter abnegation of itself and the adoption of some other name. Though it be ignored, yet, like the fabled shirt of Nessus, it clings and sticks and pricks, and the conscientious acknowledgement of its truth, though it may be disavowed, is irresistible all the same, and cannot be set aside. The laws of God and of Nature began when time began. They are as immutable now as then, and their very immutability is the earnest of the existence of all things " in the heavens above, on the earth beneath, and in the waters under the earth." How is it with men? They pass and pass in the great glass of life like the kings in Macbeth's vision, and "the places thereof shall know them no more." But Law, the Lex Suprema, that ordained the foundations of the world, and all things therein, stands fast and firm, and will forever. To make application of our drug, in view of its relation to the law of similars: We have endeavored to show, and we think we have given abundant evidence, that ergot, in its toxic manifestations, seems to address itself to almost every part of the organism, and we hope we have been equally successful in showing that the principal agency, by and through which its properties secure practical operation, is the nervous matter of the body. It is of common professional experience that in many spinal affections this remedy has a prominent place, and we have already cited the opinion of the distinguished physiologist, Brown-Sequard, as to its predilection for the lower portion of the cord. Its specific affinities with the female organs of generation are seen, not only in overcoming uterine inertia, and arousing vigorous contractions of the uterine muscular fiber, but in affections incident to the ovaries, such as interfere with the due performance of the menstrual function, this remedy is often efficiently used. And so we might go on citing very many other diseases and morbid conditions of the body in which our drug exercises beneficent and salutary effects, but they are doubtless well and familiarly known. Then, under the inexorable requirements and influences of the generic law of similars, every disease which the toxic force of ergot and its constituent elements can awaken in the human system, may and must be controlled and neutralized by the same in an attenuated form. Hence, from the many and various morbid conditions which we have enumerated as proceeding from ergotism, both acute and chronic, the whole organism is, to a greater or lesser extent, subject to its curative powers. 'Tis true, that for certain affections arising coincidently with ergotinic action, and as the result of its morbific force, there are other drugs that may exercise a still more effective force in subduing the same affections. But, as we said in the beginning of our investigation of this particular drug, and of its nerve affinities, take it for all in all, there is no drug in the whole pharmacopeia that occupies a wider scope and field of action, and exercises a more extensive sway over the organism than this one drug, and hence our reason for its selection. From the crown of the head down to the blackened and phagedenic toes of ergotinic gangrene, its influence is felt in almost every nook and cranny of the body. If our interpretation of this drug be correct and consistent with its pathogenic, as also its curative influences, and if the agencies that effect these pathogenic and curative influences are to be found in the affinities existing between nerve and drug, then may we not apply the same to all drugs used for the suppression and cure of disease, where and whenever it may occur, and may we not be at liberty to use in their connection the old and trite aphorism, "Ex uno disce omnes"—"From one learn all." Before taking leave of this, to us, most interesting and instructive subject, a few additional words by way of what seems a still more convincing illustration, may not be out of place. How is it that the deadly poisons exercise their lethal and overwhelming force upon the organism? For example, the ophidian poisons—that of rabies—and we were going to write, that of tetanus, but the evolutions of recent microbian science have assigned the etiology of this terrible disease to its proper place among the constantly increasing nosological records. The virus in which lurks almost instantaneous death, and which lives in the jaws of the "cobra di capelo," the hooded snake of India, and of our own rattlesnake, "crotalus horridus," is a seemingly bland and inoffensive fluid, yet it "holds enmity with the blood of man" and almost from the moment of the injection of its venom into his blood currents, death begins, where and how, in the blood globules and corpuscles? Almost in a twinkling, they become, not life-giving globules and corpuscles, but drops in the current of life, each one more deadly than ever floated upon the brim or commingled in the depths of the cup at a Borgian feast. What has so rudely snapped the living thread—necropsy reveals nothing, the vital machinery seems all intact and whole? What but the affinity between the living principle within us, the inscrutable nervous matter that makes up so large a portion of our physical body, and the deadly virus, which, in its primitive potency overwhelms and kills, but if attenuated and despoiled of its lethiferous force, can be made to heal and cure. So it is with the saliva issuing from the mouth of a mad dog, but which, when distilled in the magic alembic of a Pasteur, can stay and defy the most frightful fate that can possibly overtake humanity. One word more in affirmation and proof of the fixed law of similars, and of its universal application to every disease that can assail the human organism. What more convincing proof can be needed by an unprejudiced and calmly discriminating mind than the constantly accumulating record of the salutary effects of the introition within the diseased body of the very elements themselves that are productive of disease, in order to cure that disease. The whole Pasteur system, embracing its wonderful success against the devastating Charbon in the animal life of France, and its still more marvellous record of the neutralization of the scourges of hydrophobia and diphtheria, with the reports coming in perpetual succession and affirmation of its triumphs over other and various ills that afflict man, proclaim in tones that all the world may hear, that there is a law of cure as fixed as the stars, which the evolutions and developments of science are verifying and sustaining from day to day and hour to hour, and though many may refuse to regard it with other than the look askance, and the impatient shrug, yet, like Tennyson's brook, it will "go on forever," and again we quote: "*Labetur et labetur in omne volubilis ævum.*"

Electrotherapy as Means of Diagnosis in Gynæcology.—(By Dr. G. Apostoli, of Paris.) Dr. Apostoli, after a long and thorough trial of his method, has come to the following general conclusions:

1. The faradic current of tension (generated by the coil of long and fine wire) applied to the uterine cavity, according to the rules established by Dr. Apostoli in 1883, relieves, for a longer or shorter time, all ovarian pain of nervous or hysterical origin; but remains powerless or nearly so in cases of ovarian pain caused by inflammatory lesion of the peri-uterine tissue or of the appendages.

2. The same faradic current is therefore useful in diagnosis, inasmuch as it helps us to distinguish the nature of so-called ovarian pain, and to determine rapidly the differential diagnosis between hysterical and inflammatory ovarian pain. Where the two kinds of pain exist in the same patient we are helped to understand their nature by the fact that the one is relieved and the other is not.

3. If, then, the curative effect of the faradic current clears up or rectifies a doubtful diagnosis, it protects us at the same time from undertaking a useless operation.

On the other hand, if the same faradic current proves ineffective, the lesion being inflammatory, we are led to resort to a supplementary galvanic treatment, or to a surgical operation sooner or later.

4. The constant galvanic current, applied to the uterine cavity in doses gradually increasing from fifty to one hundred and twenty milliamperes, according to the rules published by Dr. Apostoli in 1884, and bearing in mind the individual susceptibility and tolerance, will be almost always supported without much pain during the séance, and without febrile reaction afterward, if the parts adjacent to the uterus are free from inflammation.

Simple cystic, peri-uterine tumors, which are neither inflamed or suppurating (such as ovarian cysts and hydrosalpinx), may also show perfect tolerance of the galvanic current.

The galvanic current is also sometimes perfectly supported by cases in which the uterus is surrounded by old inflammatory products, or exudations no longer pathogenic.

5. There are three classes of cases which should be considered as exceptions to the preceding rule, for they bear the galvanic current more or less badly, though they do not necessarily produce much febrile reaction after the séance.

They are:

A.—Certain forms of hysteria.
B.—Fibro-cystic tumors of the uterus.
C.—Enteritis with false membrane.

It is generally easy to diagnose these cases of intolerance.

6. All acute peri-uterine inflammation (of the pelvic cellular tissues, of the peritoneum and especially of the appendages), will cause the galvanic current to be badly borne when it passes forty or fifty milliamperes, and will cause intolerable pain and febrile reaction when carried beyond this intensity.

7. The intolerance for the galvanic current is generally proportionate to the extent and gravity of the lesions referred to, and increases with the intensity of the current employed—especially when it passes forty or fifty milliamperes.

8. All inflammation of the appendages which is *curable* (*symptomatically at least*) without radical operation, will bear the galvanic current better and better, and there will be a corresponding improvement of the prominent symptoms, such as pain and hemorrhages.

The intolerance noted at the beginning progressively disappears.

9. All grave inflammatory lesions of the appendages, and notably all suppurative processes which are *incurable* (*even symptomatically*) by conservative means, show the same intolerance from the beginning to the end of the treatment which was noticed at first, and which is apt to increase instead of diminish if the treatment is continued.

10. Thus, the simple study of the tolerance or intolerance of the intra-uterine galvanic treatment, and especially of the post-operative pain and fever occurring on the evening of, or the day following the treatment, enables us to make the diagnosis. It also, in four or five séances, given twice weekly, informs us of the condition of the appendages, of their possible inflammation and its degree, and in this way it lessens the number of laparatomies and exploratory incisions.

11. The same study of the so-called galvanic reactions also inform us rapidly (in five to ten séances) of the curability of these inflammatory lesions which the electric current has demonstrated, and in consequence of this it tells us in one case to abstain from operation, while in another it shows an operation to be urgent.

12. *En résumé*, gynæcological electro-therapeutics, carefully, methodically and patiently applied, instead of being opposed to the marvellous progress of surgery, come to its aid.

Independently, in fact, of the great therapeutic service which it renders every day, electricity serves as a *touchstone*; it assists us in diagnosis and thus directly serves the interests of surgery, in one case showing an operation to be useless and dangerous, in another that its necessity is urgent.

Thus many of the laparotomies, so-called exploratory incisions and mutilations, practiced without due deliberation for the relief of rebellious ovarian pain or for lesions of the appendages, of uncertain nature, should be, from this time forth, delayed or formally proscribed until all the resources of *faradic sedation* on the one hand, and of the *intra-uterine galvanic effect* on the other, have been tried. Experience has abundantly proved these currents to be innocuous, if given with necessary aseptic precautions.

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EVERY SUBSTANCE WHICH, IN LARGE DOSES, ABOLISHES THE PROPERTY OF AN ORGANIC ELEMENT, STIMULATES IT IF GIVEN IN SMALL DOSES.

—*Claude Bernard.*

STANDING upon one of the platforms of the great stairway of life, which, as we look below us seems to have no beginning, and above us rises step by step into the unknown, we realize that the results of life are uncalculated and uncalculable, and that the years teach much that the days never know. It is difficult even now to determine how much of the comparative progress during the past year is the reincarnation of old thoughts, and how much the slow culmination of experience and the crystalization of new thoughts into work which will stand the test of time. The records of the past twenty years, during which our profession has made greater advances in all its departments of knowledge than in twenty centuries before, is a record of the incarnation of the living thoughts of past ages, gathered from the crucible of experience and worked out step by step in the active truth-searching mind of the present into those living truths which have startled the world with their brilliancy, and drawn from the suggestions of empyricism the enduring basis and the substantial fruits of science. Time and experience test all things, and as we look down the stairway of time, up whose ascent we have so slowly toiled through the revolving years, we seem to be looking at what was once a vast forest over which a cyclone has swept, leaving only here and there a stately tree standing full of life and vigor among the mouldy, the dead and the dying. The great thought of to-day, captivating the profession with the beauty of its theory after running a longer or shorter course either disappears entirely from practice, or finds its true place in the tried and proven.

We look in almost breathless attention at the delicacy of manipulation and the perfect technique of the skilled operator, in which some new idea is being carried out step by step. The operation moves on with a precison, a delicacy and almost a certainty as regards results which would seem to leave nothing wanting in the full and complete triumph of modern science. But sometimes there rings on the ear of the inner consciousness the startling note "cui bono?" Has it been necessary to mangle the human body and change the temperament of a patient to secure results which could have been secured through the resources of therapeutics? Is not the ease with which a disease can be removed by the knife oftentimes a temptation to the skilled operator to accomplish his work quickly, rather than wait for the slower process of therapeutics, involving as it does that close thought and careful knowledge of remedial agents necessary to accomplish his purpose?

A surgeon from a central city of this State, noted for his skill as an operator, for his careful diagnosis and accurate knowledge of means to produce the desired results, visited the other day one of the leading hospitals of this city and witnessed three operations by a surgeon who ranks among the leading men in his specialty in this city or the world. The operations were hysterectomy, skin grafting and for apendicitis. The technique was perfect. The knife seemed to be instinct with life, and the visiting surgeon, as he watched the successive steps of the operation, was filled with admiration at the dexterity, the delicacy, yet firmness of touch and the perfect knowledge shown by the operator in every step of his work. And yet the work, said the visitor, was purely mechanical, cutting, and nothing more, lacking in every sense the true spirit of the surgeon, who seeks first of all to save, using the knife as the last resource. "I would have guaranteed," said the visitor, "to have cured every case with ordinary therapeutic measures, and that, too, in a very short time."

We have the most profound admiration for the triumphs of modern surgery. The record is a brilliant one, and lives are daily saved by the skill of the surgeon, which less than half a century ago would have been lost. A good surgeon must be a good physician also, and be in no hurry to rush into his specialty. If he has a special talent it will sooner or later assert itself, and this may be said of every specialty. A man is like a Labrador spar, which has no special lustre, nothing remarkable in its appearance until as you turn it in your hand you reach a certain angle, when you are startled by the flash of deep and beautiful color, and at once recognize the value of the crystal.

What we have said of the specialist may be said to a certain extent of the general practitioner. Not all the new ideas which swarm the pages of medical journals and medical books come to stay. Holmes remarked in one of his witty paragraphs in his "Autocrat of the Breakfast Table" that formerly there were twenty remedies for one disease, but the time would soon come when there would be twenty diseases for one remedy, and that is the case to a certain extent at the present time. The long list of so-called remedies which filled our materia medica, each with its hundreds of symptoms, real and imaginary—a large portion imaginary—are giving way to a few great specifics, whose wonderful powers have been tried and proved. These, with a better understanding of the laws of life, are among the great triumphs of modern therapeutics.

Our profession is every year enlarging its domain, linking itself with and utilizing the researches of all sciences in its great work of purifying the fountains of life and eliminating the causes of discord and disease. The TIMES will strive, in the future as in the past, to gather into the focus of its pages the rays of light and truth from all sources of practical science which may tend to elevate humanity. In this great work its spirit goes out in warm and brotherly greeting to the thousands of old and new friends in every civilized nation in the world. To one and all the TIMES extends the warm hand of fraternal friendship and love.

WHY AM I NOT A HAHNEMANIAN?

AT the invitation of the Dunham Medical College, Chicago, President William E. Quine, of the Chicago College of Physicians and Surgeons, a recognized center of old school orthodoxy, answered the question, before a large audience, in the amphitheatre of Cook County Hospital: "Why Am I Not a Hahnemanian?" The lecture sparkled with wit, and was full of telling points. He thought Diogenes' lantern would be required to find a pure Hahnemanian, as, according to the testimony of Dr. Hale, who was pretty good authority, there were not in Chicago to-day more than eight Simon-Pure Hahnemanians. The speaker expressed an utter contempt for what he called sham Homœopaths, who used the name as a trade-mark, and who were, after all, nothing more than birds of prey, pecking at both sides, and plundering both. Warming with his subject, the speaker exhorted the class *to be honest*, but, if they were not built that way, why then be lawyers. "The old schools are all gone," he said. "Each has produced something of value, and yet can you not read the writing on the wall?

"Homœopathy has unquestionably done a noble work, introducing a revolution that has exterminated bleeding, purging, vomiting, salivating and the like torture of the wretched dying. Hahnemann banished the lance. He demonstrated that the sick could get well without any medicine at all. He promoted the philosophical study of disease. He taught the prudence of small doses and the accuracies of medication. Who else had done as much as this for therapeutics? In spite of his absurdities and rancorous abuse, Hahnemann wrought a great and good work in the transition period of the Napoleonic wars. But his self-styled disciples at once began to repudiate his most distinctive theories.

"The Allopath to-day has no theory for every case. He welcomes all light and is free to practice medicine as he pleases, subject only to the law of the land. If you believe in similars or contraries, no matter. Walk right in. The attitude of the old school toward the new school is often misunderstood. There is broad toleration, as set forth with authority by the National Medical Society.

"Why is the medical profession still divided? Because the new school will not give up the name of Hahnemann, though it has so unanimously discarded Hahnemann's teachings. They do not now maintain that *similia similibus curantur* is infallible or the only cure. Why longer repeat the shibboleth? Again, bigoted and irreconcilable anger on my side of the debate, lack of generosity, lack of everything that characterizes the Christian spirit, has been and is now of great assistance to my Homœopathic friends in keeping us apart. All my powers, slight though they be, are enlisted for a reunion."

THE BICYCLE FACE.

IN the midst of the ceaseless pæans of praise to the bicycle as one of the most health-giving institutions, a faint voice of warning sometimes is heard, remarks a contemporary. Thus a recent medical writer in the *St. James Budget*, while not denying the undoubted virtues of bicycle exercise, points out that not all riders present that healthful appearance one might look for, and, in fact, there is seen among their number a type—ashen hued and haggard—already recognized as the "bicycle face." Not so with tricycle riders, and here is where he looks for an explanation. The distinguishing feature of the bicycle, and especially of the safety, this observer claims, is the difficulty of maintaining the equilibrium. Learning to ride means mastering the art of keeping the machine upright. It has the tendency to fall to one side or the other all the time, which has to be counteracted by a special effort. The learner knows it very well, to his cost; but, once learned, he forgets all about it, and does his balancing more or less automatically. Nevertheless, the effort is still there, and puts a constant, though unconscious effort, upon his brain and nervous system. The reason why the bicycle has to be "learned" at all is that the center of equilibrium in the brain requires to be taught the business of doing its duty under novel circumstances. The falling bicycle is maintained upright by a constant series of small muscular movements, which unconsciously adjust the weight in the proper position, and are themselves controlled by a special brain center, situated at the back of the head. The strain upon this center is incessant, though unmarked, and some people cannot stand it for more than a short time. This it is that causes the headache and nervous exhaustion. Probably it does not affect those who begin very young, and possibly it affects those with either very tough or very dull nerves but little. Most of us, however, are obliged to live in such a way that our nervous systems become very susceptible to any unaccustomed strain, and those who are most likely to use the bicycle belong to the most susceptible classes. The nervous effort entailed by balancing the machine is too much for them. The explanation may strike some people as fantastic, but it is sound physiology, and it squares with the facts. Experienced cyclists often say that the tricycle, and even the old high bicycle, which requires less effort to balance, are less fatiguing for prolonged work, such as a tour, than the safety; yet the latter is lighter, quicker, and superior in nearly every respect, save that of stability. It is a question of balance. "Wheeling" is not a pursuit that will suit everybody.

THE recent *coup de maitre* of the medical colleges of this city to obtain control of the clinical material in the hospitals has led to investigations of these teaching bodies which may result in the establishment of schools of this class which will rank with other teaching bodies in the State, and not be controlled by close corporations. There seems to be no reason why medical schools should be conducted differently from other scientific schools, and to change the plan the teachers must not be dependent upon the fees of students.

DR. E. W. HOLMES, Demonstrator of Anatomy, University of Pennsylvania, in an address on "The Dissecting Room" (*Intern. Med. Magazine*, June, 1895), makes a happy suggestion, which, we have no doubt, will be acted upon sooner or later. "I have already," he said, "disclaimed any intention of detracting one iota from the value of lectures, but really how opportune if the phonograph could be utilized for this purpose! Let the most able and scientific of this society write out a series of lectures, which could be spoken into the instrument by the most eloquent member. Then a tyro could turn the crank, and deliver to a delighted audience the most perfect of courses, and these could be multiplied indefinitely, so that each medical school could be supplied on demand, while thereby could be secured that uniformity of nomenclature [the want of] which has harassed the minds and hearts of our members for a considerable season."

Instead of "the most eloquent member" we would recommend employing the best *elocutionist* procurable.

CAMPHORATED SALOL.—Dr. Bower, in the *Boston Medical and Surgical Journal*, recommends for boils and carbuncles a preparation made by moistening one part of camphor with a few drops of alcohol, and rubbing in a mortar with one-fourth part of salol, till a transparent fluid is obtained, which he calls *camphorated salol*. A change takes place in from twelve to twenty-four hours; pain diminishes, and the tumor becomes progressively smaller, without the formation of pus. The part is covered with cotton soaked in the remedy, with an impenetrable covering outside.

WE are glad to see that some of the medical journals of this city have taken up the question raised by the TIMES some years ago, as to whether a medical college, a private corporation, has any right to occupy ground belonging to the city. Perhaps the Commissioners of Accounts, who are doing such excellent work in some departments, may investigate the matter if it is brought to their attention.

CALOMEL.—We copy from the *Journal of the American Medical Association*, which has no expression but of contempt for the philosophy of Hahnemann, an article on the modern use of calomel, so directly in line with the teachings of that great scientist, and the practice of those in later days who have drawn inspiration from his practical investigations, that it would be impossible to escape the notice of modern thinkers. Journals of this class, when they profit by the teachings of the great German philosopher, and fill their pages with developments of so-called modern science constructed upon the same lines and the evolution of the same great principles, are very careful not to mention the source of their inspirations or speak in any terms, but of contempt, of the school which has done so much to reconstruct upon a scientific basis the therapeutics of the world. It is perhaps unfortunate that the school of progress, including, as it does, the principles which form the ground work of modern scientific therapeutics, utilized to a certain extent by the whole medical profession, should have been inaugurated under a name which by no means represents the catholic spirit of the school, or its strong grasp upon those living truths, daily worked out in the crucible of science. Possibly there may be some chivalry in clinging to a name under which the battle of reform has been so bravely fought, even though it may have been unwisely chosen, but is there any chivalry, any honesty in fact, in adopting principles and practice, as is done by the old school, the authors of which are entirely ignored or treated with contempt? The article which we copy below, from the *Journal of the American Medical Association*, will, we think, justify our remarks, and show how much of the advanced literature of the old school at the present time is borrowed from the teachings of the new school.

"Dr. W. Blair Stewart has made a clinical study of the use of calomel in 144 cases, chiefly of gastro-intestinal disorders. He finds that 1 grain of thoroughly triturated calomel is equivalent to 5 to 10 grains of the untriturated drug. If given for its purgative effect, or for its action on the liver, one-tenth of a grain triturated is administered every hour or half hour until free evacuation occurs, or 1 grain is taken; then, if necessary, ounce doses of *liquor magnesii citratis* can be given until free action of the bowels is obtained. The drug is not a direct diuretic *per se*, but it may act indirectly to a slight extent, simply by its general stimulating action upon the emunctories of the entire body, thus favoring secretion, excretion, and the elimination of intestinal ptomaines and systemic poisons, all of which act unfavorably upon the secretory and excretory organs when present. Seventeen cases of diarrhœa, due to the ingestion of improper food, were speedily cured by 1-12 of a grain of triturated calomel, and one-half this quantity of podophyllin, every two hours. Nine cases of so-called bilious diarrhœa in adults responded rapidly to one-quarter grain doses every four hours. Sixty-eight cases in children received a saline cathartic as preliminary treatment, then 1-100 of a grain each of calomel and powdered ipecacuanha was given every one to four hours with 'marvelous' results. Twenty-five cases of obstinate diarrhœa, which had been running some days before consultation, responded rapidly to a combination of 1-10 of a grain of calomel and 1 grain each of lacto-peptine and zinc sulpho-carbolate, given every two to four hours. Four cases of diarrhœa in typhoid fever were markedly benefited by the same combination. In the diarrhœa following excessive use of alcoholic liquors, excellent results were obtained from 1-40 of a grain of calomel and 1-100 of a grain of podophyllin every three or four hours. This clinical testimony is advanced to show the efficacy of calomel and its eliminative power, as contrasted with the evil routine methods of using astringents and opium in the treatment of diarrhœa."

THE Court of Appeals has decided against the City, in its contest with the State, over the question as to its liability for taxes in support of the insane. The amount involved is said to be about $5,000,000, and was caused by the assumption on the part of the politicians in control of the City, of the right to provide for its own insane. The result is that the City has to pay the State for the care of its wards which it has supported itself, thus compelling tax payers to pay twice. This may be law, but is it justice?

There can be no doubt that the State law is constitutional and that the City should have obeyed, therefore the responsibility rests with the rulers of the City during the last decade!

WE are pleased to note that there is a movement on foot to form a "National Confederation of State Examining and Licensing Boards," with the purpose "of reciprocal interstate action on the part of the State examining boards." Dr. Charles McIntire, of Easton, Pa., is chairman of the committee, and invites correspondence.

DURING the past year 7,480 patients have been treated in the Metropolitan Hospital, with a death rate of 5.63. During November there were forty-four operations in the surgical and gynæcological departments, many of these capital operations. The training school is in good working order, giving most efficient and satisfactory help to the hospital, and its graduates doing excellent work wherever employed. Under the active and intelligent supervision of the Chief of Staff, Dr. Stewart, the hospital is rapidly becoming one of the most serviceable and best ordered institutions in the department.

LEPROSY.—At a dinner recently given to Professor Geanturco, of the University of Naples, by the Italio-American Academy of Medicine in this city, the professor, who is visiting America at the request of the Italian Minister of Instruction, spoke briefly and modestly of his researches and discoveries in leprosy. Following Professor Miser, of Vienna, he has isolated the bacillus of leprosy, which is almost identical in size and appearance with the tuberculosis germ, and has proved, he thinks, that it is contagious, but not infectious, and not hereditary. He claims that the bacillus of leprosy follows the outside sheath of the nerves, and is not disseminated through the system, as in the bacillus of tuberculosis. He thinks now that the bacillus is isolated, we are on the eve of the discovery of some agent which will destroy it, and thus control and eradicate the disease.

EDEBOHLS very justly says the bimanual examination of vaginis intactœ should always assume the form of a recto-abdominal palpation. There is no need in these cases of a vaginal examination. The finger in the rectum will teach us all we wish to know concerning uterus, tubes and ovaries. The only difficulty to be overcome is to identify the cervix, and a little practice will soon enable us to master this detail. In this connection, we might say that the speculum is often used unnecessarily. The finger of the physician should be so sensitive as to form a kind of sight, in many cases quite as intelligible as the eye.

THE *Ladies' Home Journal* is to be congratulated upon its decision to decline all advertisements of a "medical, remedial, or curative nature," upon the ground of unwillingness to assume the responsibility, slight as it might be. This is certainly a courageous move, and should be appreciated by the profession. Other leading magazines would do well to follow suit.

BENZOSOL IN DIABETES.—Piatowski adds to the numerous drugs which have more or less standing in the therapeutics of diabetes benzosol, whose action in controlling the elaboration of sugar, as in many cases it does to a remarkable degree, has not yet been determined. The drug is a compound of benzoic acid and guiacol, the latter prepared from creosote, insoluble in water, odorless and tasteless. As salol is transformed in the intestinal canal into its constituent elements, carbolic and salicylic acid, in a condition to be readily absorbed, so benzosol is transformed in the gastro-intestinal canal into its separate compounds, guiacol and benzoic acid. The drug is best given in capsules, and may be used in progressive doses, from 1 to 15 grains, two or three times a day. Dr. Blake White, in speaking of this drug in a paper read before the State Society, recommends in connection with it the use of the carbonate of lithium and Fowler's solution in Vichy in the morning, suggested by Dujardin-Beaumetz. Given in this way it stimulates the nerve centers, lowers the specific gravity of urine and controls the excretion of sugar. The disease often proves so intractable that we hail with gratitude any new remedy possessing positive results.

THE section on general medicine in the Academy of Medicine recently discussed the subject of red-bone marrow in splenic myelogenous leuchæmia, in which it appeared that this remedy had been of no benefit.

Arsenic seemed to be the best remedy in the hands of those who took part in the discussion.

Red bone-marrow was reported to be of use in some cases of simple anæmia. It is evident that bone-marrow has not yet found its place.

MONSTROSITY.—A child was recently born in an obscure town in the State of Oaxaca, whose head possessed a mouth but no nose; ears regularly proportioned and eyes finely shaped, but located on the top of the head. The child has since died, and the head was sent to the State museum.

THIRST and great dryness of the mouth in sickness is often relieved by a teaspoonful of powdered gum Arabic, beaten thoroughly with a couple of teaspoonsful of glycerine, to which is added a glass of cold water and enough lemon-juice to make the mixture palatable. The mixture may be taken freely, with great relief to the dryness of the mouth and thirst.

BIBLIOGRAPHICAL.

INFLUENCE OF THE THYROID GLAND ON NUTRITION. THE TREATMENT OF GOITRE, ETC., BY DESICCATED THYROIDS. ON "INTERNAL SECRETIONS."

Reprints of articles from medical journals on these subjects will be sent free by Armour & Co., Chicago, upon application.

HOW TO DISINFECT. A guide to practical disinfection in everyday life, and during cases of infectious illness. By C. T. Kingzett, F. I. C., F. C. S. Price 10 cents. The American & Continental "Sanitas" Co., Ltd. New York.

A practical little *brochure* for the use of nurses and others who require the information indicated by the title.

HINTS IN DOMESTIC PRACTICE AND HOME NURSING. By Anna Temple Lovering, M.D. Boston and Providence: Otis Clapp & Son, 1896; pp. 170; 12mo.

This little book is all that is required in the majority of instances for the purpose indicated, and is much better than a larger one.

There is no doubt it will find an extensive field. The hints for nursing are an important addition to a work of this kind.

PHYSICAL, INTELLECTUAL AND MORAL ADVANTAGES OF CHASTITY. By M. L. Holbrook, M. D., New York, Editor of "The Journal of Hygiene and Herald of Health," etc., etc., etc. New York: M. L. Holbrook & Co. Large 12mo.; pp. 120. Price, $1.00.

This little book is written upon that high plane of morality which characterizes all the emanations from the pen of this anthor.

It has been the aim to present the great advantages of chastity, rather than the evils of unchastity, so that the book is a proper one to place in the hands of young persons of either sex, with the view of inspiring them with a high ideal of life, physically, intellectually and morally. The physician often finds a place for such a book.

MANUAL OF THE ESSENTIALS OF THE EYE AND EAR. By J. H. Buffurn, M.D., Professor of Ophthalmology and Otology in the Chicago Homœopathic Medical College; Ophthalmic and Aural Surgeon to the Chicago Homœopathic Hospital and Dispensary; Consulting Oculist to the Chicago Baptist Hospital, etc., etc., with illustrations in black and chromo lithograph. Chicago: Gross & Delbridge Co., 1896; 12mo., pp. 315.

This little manual, as the title indicates, is intended to give the essential diagnostic points of the various diseases of which it treats.

The work is done in the shape of questions and answers, an excellent method, which has become so common of late. The medical colleges having now adopted largely the recitation plan, such books as this will find an increasing field for usefulness. The text is concisely and clearly stated, and well illustrated.

ELEVENTH ANNUAL REPORT OF THE WESTBOROUGH INSANE ASYLUM. For the year ending Sept. 30, 1895.

The daily average number of patients was 564. Patients recovering, 567. There were twenty-four deaths from senile dementia, and six from apoplexy. During the year there were admitted sixty-two cases of acute mania and melancholia, of which forty-seven were discharged, cured. The rest cure, which originated with Dr. Weir Mitchell, of Philadelphia, some twenty years ago, is utilized in tired-out and exhausted patients with marked success. Great benefit has been found in chronic cases in persons in good physical health, in some forms of light, pleasant labor.

ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES. A Yearly Report of the Progress of the General Sanitary Sciences throughout the world. Edited by Charles E. Sarjous, M. D., and seventy associate editors, assisted by over two hundred corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings and maps, in five volumes. 1895: The F. A. Davis Co., publishers.

A criticism of this exhaustive work would be very much like criticising the Encyclopædia Britannica. It is only necessary to announce the eighth issue of this annual, somewhat late, it is true, but full from beginning to end with interesting and most valuable matter, and, as in all the previous editions, a library in itself.

A MANUAL OF SYPHILIS AND THE VENEREAL DISEASES. By James Nevin Hyde, A. M., M. D., and Frank H. Montgomery, M. D. With 44 illustrations in the text and eight full page plates in colors and tints; Philadelphia: W. B. Saunders, 1895.

The authors state in their preface that their object has been to meet the special needs of the student and the practitioner rather than the expert. While points of controversy have been avoided, well established facts have been clearly and concisely stated, which cover over the whole ground of the study and treatment of venereal and syphiletic diseases.

THERAPEUTICS OF THE EYE. By Charles C. Boyle, M. D., O. A., A.M. New York: Boericke, Runyon & Ernesty, publishers, 1896.

Dr. Boyle has divided his work into three parts, Part I. being a *materia medica* alphabetically arranged of symptoms pertaining to the eye. In Part II. the author has prefixed an asterisk (*) to symptoms which have been verified in his own practice. Dr. Boyle's well-known accuracy of diagnosis and intelligence in selecting the proper remedy, makes this symptomatic verification one of the most valuable features of the work. The general index in Part III. serves also as a repertory to the other two parts.

DIPHTHERIA AND ITS ASSOCIATES. By Lenox B. White, F. R. C. S., editor. J. E. Lippincott Co., Philadelphia, 1895.

The author says: "The present essay is based mainly on a course of lectures recently delivered for the purpose of establishing a landmark at an important era in the history of diphtheria, and of impressing the desirability of assimilating the teachings of bacteriology to the purposes of practical medicine. In other words, to indicate the necessity for the scientific expert and the clinician to work together as colleagues, and not as rivals." The result is a work almost classic in style, showing careful discrimination and excellent judgment.

PREGNANCY, LABOR, AND THE PUERPERAL STATE. By Egbert H. Grandin, M.D., Consulting Surgeon to the New York Maternity Hospital; Consulting Gynæcologist to the French Hospital, N. Y., etc.; and George W. Jarman, M.D., Obstetric Surgeon to the New York Maternity Hospital; Gynæcologist to the Cancer Hospital, New York, etc. Illustrated with forty-one original full-page photographic plates from nature. Royal octavo, pp. viii, 261. Cloth, $2.50 net. Philadelphia: The F. A. Davis Co., publishers, 1914 and 1916 Cherry street.

We have in this volume a work less of theory than of fact, plain, simple, clinical facts, presenting an accurate picture of the pregnant woman in every stage of fœtal development, and in the successive stages of labor. The story is so clearly and concisely told, illustrated at every step with photographic plates taken from the manipulation of the manikin or from the living person, that as a guide to practice it is the best substitute we have seen for clinical instruction at the bedside.

The International Encyclopædia of Surgery. A systematic treatise on the theory and practice of surgery, by authors of various nations. Edited by John Ashhurst, Jr., M.D., LL.D. Illustrated with chromo lithographs and wood cuts. In seven volumes. Vol. VII. (supplementary volume). New York: William Wood & Co., 1895.

The rapid advance in surgery since the previous volumes of this great work were issued from the press, seven years ago, renders a supplementary volume, bringing the science and art of surgery fully up to the present time, an absolute necessity. This volume has been prepared with the same painstaking accuracy which characterized the preceding ones. To those possessing the other volumes this one will be indispensable, completing an encyclopædia on the science and art of surgery unequaled in fullness of information and minuteness of detail by any in the English language.

E. B. Treat, publisher, New York, has in press for early publication the *1896 International Medical Annual*, being the fourteenth yearly issue of this eminently useful work. Since the first issue of this one-volume reference work, each year has witnessed marked improvements, and the prospectus of the forthcoming volume gives promise that it will surpass any of its predecessors. It will be the conjoint authorship of forty distinguished specialists, selected from the most eminent physicians and surgeons of America, England and the Continent. It will contain reports of the progress of medical science at home and abroad, together with a large number of original articles and reviews on subjects with which the several authors are especially associated. In short, the design of the book is, while not neglecting the specialist, to bring the general practitioner into direct communication with those who are advancing the science of medicine, so he may be furnished with all that is worthy of preservation, as reliable aids in his daily work. Illustrations in black and colors will be consistently used wherever helpful in elucidating the text. Altogether it makes a most useful, if not absolutely indispensable, investment for the medical practitioner. The price will remain the same as previous issues—$2.75.

Practical Urinalysis and Urinary Diagnosis.—A Manual for the Use of Physicians, Surgeons and Students. By Charles W. Purdy, M. D., Queen's University; Fellow of the Royal College of Physicians and Surgeons, Kingston; Professor of Urology and Urinary Diagnosis at the Chicago Post-Graduate Medical School. Author of "Bright's Disease and Allied Affections of the Kidneys"; also of "Diabetes; Its Causes, Symptoms, and Treatment." Second, revised edition, with numerous illustrations, including photo-engravings and colored plates. In one crown octavo volume, 360 pages, in extra cloth, $2.50 net. Philadelphia: The F. A. Davis Co., publishers, 1914 and 1916 Cherry street.

The first edition of this admirable work was published in 1894. The exhaustion of the edition in one year is a proof of the high estimate in which it is held as a text book and an office guide by the general profession. By a mistake of the proofreader urinalysis is rendered uranalysis.

"American Medical Review." A Monthly Review of Current Medical Literature. Daniel Lewis, A. M., M.D. Editor. New York: The R. N. Palmer Co., 106 Fulton street.

The editor says in his "Salutatory" that "this journal will be to the medical literature of the day what the *Review of Reviews* is to the world of letters," and we sincerely hope the aim may be justified. He says further: "We have no fads, not even a medical theory," to all of which we say amen!

The Times extends the right hand of fellowship to Brother Lewis, and hopes that his venture may be as successful as he deserves.

The Principles and Practice of Medicine. Designed for the use of practitioners and students of medicine. By William Osler, M.D., Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University and Physician-in-Chief to the Johns Hopkins Hospital, Baltimore, Md. Formerly Professor of the Institutes of Medicine, McGill University, Montreal, and Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia. Second edition. New York: D. Appleton & Co.; 1895; pp. 1143; octavo.

The second edition of a classical work like the one before us only requires to have its changes announced, so that holders of the first edition may judge as to whether they need the latest issue. We find that several sections have been re-written, all carefully corrected, and here and there many fresh details have been added.

The article on typhoid fever has been thoroughly revised, and that on malarial fever mainly rewritten. Diphtheria has been much more fully considered than in the previous edition, as have also the articles on septicæmia and pyæmia. In fact, there are numerous changes and additions which go to enhance the value and usefulness of the book.

On the whole, the text is what might be expected from an author of the eminent standing of the Professor of Medicine in so important an institution as Johns Hopkins University. There can be no doubt of the work being standard.

The Practice of Medicine. By William C. Goodno, M.D., Professor of Practice of Medicine in the Hahnemann Medical College of Philadelphia; Physician to the Hahnemann Hospital, etc. With Sections on Diseases of the Nervous System by Clarence Bartlett, M. D., Lecturer on Nervous and Mental Diseases in the Hahnemann Medical College of Philadelphia; Senior Neurologist to the Hahnemann Hospital, etc. Vol. II. Diseases of the Circulatory, Respiratory, Urinary and Digestive Systems, Diseases of the Blood and Constitutional and Parasitic Diseases. Philadelphia: Hahnemann Press, 1895; pp. 981; large octavo.

The second volume of Dr. Goodno's careful handiwork is now before us, and we must take this opportunity after months of practical use, of emphasizing what we said in review of the first volume. We may even say that we did not give the work that credit which experience will bear us out in doing now. The text is stamped everywhere with keen discernment, concise statement, and practical application. It is also free from verbiage and other non-essentials, which occupy so much space in some books. The etiology, pathology, morbid anatomy, symptomatology, diagnosis, and prognosis are all treated at sufficient length for a work that does not pretend to be a cyclopædia, while to the treatment, the part that the practitioner seeks so anxiously when required, is given greater attention than is ordinarily done in similar treatises. The treatment is written from a broad and liberal standpoint, and is not confined to the use of drugs by any means.

We are confident that this will find a much larger field than is the case with any book of its class. In these days there are many inquiries from broad-minded practitioners for literature written from the standpoint of this author, and from them much may be expected. We, as editors, are frequently applied to for a "practical, common sense book" of this kind, and we take the present opportunity to commend Dr. Goodno's treatise to all such, as the one they want. The Hahnemannian *purist* may be disappointed with the indications for the use of drugs, and refuse to accept it as a text book, but the great bulk of the profession, who are liberal enough, will more than make up for this deficiency. The physical part of the work is all that can be desired.

Dr. M. C. Jenison, of Minneapolis, in the *Ohio Dental Journal*, reports the use of electricity in controlling hemorrhage from the extraction of teeth, the current causing instant coagulation of blood.

CORRESPONDENCE.

"MALE AND FEMALE."

Messrs. Editors:

In your journal of October, page 313, I see an article discussing the cause of sex. This has been a knotty problem for many a year, and probably will never be solved until we get more into the "true inwardness" of the subject.

Added to the theory advanced by the writer referred to several more may be added. Several years ago a writer in a Western journal urged that there was a *heat center* in the womb that determines sex.

Others have proposed that physical vitality of the mother decided the question, *i.e.*, that the greater the vitality, health or bodily strength of the woman, the greater the likelihood of all male children. That lessened vitality or reduction of strength of the mother during gestation threw the balance in favor of female births. Yet, I have noticed that the greater the size, strength and vitality of the woman, the smaller and punier the infant. Others again affirm that nourishment of the fœtus in the early months of gestation had a tendency one or the other way. All theories are about as correct as that of a woman who predicted to me: "It will certainly be a boy, because I turned on my right side," (*i.e.*, after copulation). Her prophecy was so far correct, that when born *it was a girl*, much to her disgust of signs.

Some have urged, in the way of "nourishment of the fœtus" theory, that in the insect tribe the queen bee is produced by a change to honey in the food of the pupa.

"Male and female created he them." True, this is quoted from a not up-to-date medical book and not backed up by good professorial authority. But being ancient of days, the outcome of the best thought of centuries of a nation's life, it is deserving of respectful consideration. Ever since that creation, animals and plants have brought forth male and female of their kind.

There are families in my clientele, in two of which there are six girls successively and lastly, the seventh, a boy. In another there are four boys in succession. In another, six boys, one girl and one boy in rotation. In most of them the sex alternates, which seems to be the most reasonable arrangement. In the animal kingdom I have known stallions and bulls which never produced a female, in five years' service of its kind. All were males. In such cases would it be unreasonable to suppose that the spermatozoa were all male? The lamented J. Marion Sims, in his work, says: "Examined under the microscope, there are two kinds of micro-organisms, differing in size, color and markings," and hints that one of them must be the male. From my study of his writings, I am led to believe he thought the sex was determined *in the entogoa*, being male or female from the start. Reason would seem to point that way, and in the human family, the perfected work of our "Maker," the germ differing as Dr. Sims affirms, would seem to confirm the theory almost into a fact. His idea, there being a difference in the sex of the spermatozoa, whichever impregnated the ova it, the fœtus, was of that sex. Now instead of wandering into the domains of "accident of surroundings," would it not be more to the purpose to suppose that in this small matter our "Maker" did not order laws for everything else and leave his perfect handiwork to chance?

In what other part of His creation is chance the rule? In what other part of it are there not fixed laws to govern? In furtherance of this chance theory it has been asserted that "up to the third month of gestation the sex of the fœtus *was not* distinguishable."

Is *this* a fact? Has it been proven? Let me see. My friend, George H. Ogbourne, M. D., has in his possession a less than two months' fœtus one and half inches long; the male genital organs *are perfectly distinct*. I respectfully refer any doubting Thomases to him, at this P. O., for confirmation.

I have seen, and until a year or two, had in my possesion, a seven weeks' and a two months' fœtus, one male, one female; in both the organs were *perfectly distinct* to the eye and very plain by a magnifying glass. In three cases, then at least, the sex *was* distinguishable prior to the third month. In further assistance of the theory or assertion that the sex is not determined up to the third month, it is still further urged that accident might even at that period suddenly change the sex, such as shock, grief, malnutrition, etc.

Now let us suppose, for the nonce, that common sense is the rule in God's works; would it not be more reasonable to conclude that the spermatozoa are of different sex? Can *this* be proven? If so, would it not be a better plan to start from this end-to work? We have microscopes of almost fabulous power, the solar and ordinary; why cannot these be brought to bear to determine the difference, if any, in the entozoa?

It has occurred to me that the discovery of the remains of a fœtus inside of the body of a grown man, as recorded recently in a Northern city, and in other instances on record, might be from a double impregnation of the same ova, two entozoa instead of one finding an entrance at same time.

Brethren, "is the game worth the candle?" If so, will not some one capable lead the way to what may be "a fact?"

B. H. Brodnax.

Brodnax, La., Dec., 1895.

CANTHARIDES IN ALBUMINURIA.

To the Editors N. Y. Medical Times:

An editorial notice of M. Lanceraux's report to the Académie de Medicine, on the use of cantharides in albuminuria, in the December number of your journal, reminds me that I have used the tincture of cantharides in the treatment of post-scarlatinal and diphtheritic nephritis recurring in children, for the past fifteen years, with the most brilliant and successful results. It was only a few moments before reading the above alluded to editorial, that I thought it strange, on reading Dr. George C. Tyler's excellent article on the antitoxine treatment of diphtheria, in the same journal, that in the four remedies he has found indicated for either scarlitinal or diphtheritic nephritis he did not include cantharides. But perhaps he was only following the lead of such authorities as Dr. Clifford Mitchell, of Chicago, who, in his work on diseases of the kidneys merely mentions cantharides as specially indicated when there is an incessant desire to urinate, with pain before, during and after the flow of urine; all mere bladder symptoms. Dr. Hare, of Philadelphia, in his work on therapeutics, however, directs attention to the use of cantharides in the late stage of acute desquamative or parenchymatous nephritis; but judging from a large experience of my own, he makes the dose far too large—viz., 1 to 20 drops three or four times. The daily dose I employ is from ⅛ to 1-16 of a drop every three or four hours, according to the severity of the attack, as shown by an examination of the urine under the microscope.

My original idea for the use of cantharides in acute and sub-acute desquamative nephritis was based upon the results obtained by Prof. Cornil, of Paris, in his original investigation of the "Histological Lesions of the Kidney in Albuminous Nephritis," published in the *London Practitioner*, Vol. 27, p. 110. Prof. Cornil poisoned rabbits and dogs with various doses and preparations of cantharides, and found lesions in the preparations of their kidneys that he freely admits it would be impossible to distinguish from those of a child dying from diphtheria, with albuminuria, or scarlatina. He observed, from doses of two-fifths mill. gram., subcutaneously injected, intense congestion affecting the glomerali, increased tension of blood in the vessels, the passages through their walls of its liquid constituents of serum, carrying granules along with it, and of some red and white corpuscles, which accumulated in large numbers in the cavity of the glomerulus. At a later stage inflammation shows itself in the straight and collecting tubes by multiplication of the cells and modification of their form, and by migration of leucocytes. The mucous membrane of the bladder, intestine, larynx, trachea and bronchi were also found inflamed.

Believing firmly in the theorem that the primary physiological action of a remedy or minimum dose is the direct opposite of its secondary physiological action or poisonous dose, and that the primary physiological action of a drug exerts a therapeutical effect in a disease whose symptoms resemble those produced by the secondary physiological action of the same drug, I felt confident that cantharides was not only the best indicated, but as shown by Cornil, a scientific remedy for scarlatinal and diphtheritic nephritis, and I was happy to find from practical experience that my confidence was not misplaced. Many of my younger medical friends who have attended my clinics, can bear corroborative testimony to this statement. S. HENRY DESSAU, M. D.

OUR PHILADELPHIA LETTER.

Medical matters in the Quaker City have been active and interesting.

The colleges generally report an increased attendance, notwithstanding the higher standard of requirements for admission.

The Medico-Chirurgical has begun the erection of operating rooms which they claim will be unsurpassed in the United States.

The dormitories of the University of Pennsylvania are well under way, and when completed will add another imposing pile to her cluster of stately buildings.

St. Luke's Homœopathic Hospital is the title of a new non-denominational hospital that is designed to supply the needs of the extreme northern part of Philadelphia, including Germantown. The new institution is located at 3326 North Broad street, and starts with every prospect of success. Its management comprises representative citizens, and a complete medical staff has been appointed.

Medical circles have suffered a severe loss in the death of Dr. A. R. Thomas, Dean of Hahnemann Medical College.

While closely identified with Hahnemann Medical College, yet Dr. Thomas was above the limitations of any school of medicine; his ability was recognized by all, and he was widely esteemed as one of our most useful and honored citizens.

It was thought eminently fitting that some public notice should be taken of his death, and a memorial meeting was held at Association Hall on Friday evening, Dec. 13th.

Dr. W. C. Goodno presided, and addresses were made by Pemberton Dudley, M. D., President of the Pennsylvania State Board of Health; Dr. J. H. McClelland, of Pittsburg, also a member of the State Board of Health; Rev. Dr. McVickar, rector of Holy Trinity Church, and Mr. George C. Thomas, head of the banking house of Drexel & Co.

The speakers referred to his professional and executive ability, his many virtues and his strength of character.

C.

PASTEUR.

Many men have distinguished themselves amongst their fellow men, either in the field of battle, of politics or of social economy; others have reached as high as Olympus, have conversed with the gods and given us the product of their imagination; others have robbed the secrets of heaven and earth, but none has rendered to his fellow men so many signal services as the celebrated Pasteur. His works, the results of his investigations, will forever resist the rust of time. The prints that Pasteur has left in this century have been produced by ideas and services that will always be present to the memory of men, for they are tangible and more accessible to the mind of every man. We all are interested in discoveries that have for their object to stop the fatality of diseases, to increase the duration of life and the number of the living.

Now, let us consider how did Pasteur proceed in his investigations. The field of his researches was Nature; he questioned her; he begged of her to let him know her secrets; he was in earnest, and to his questions she gave the most admirable and astounding answers.

But was this the only source whence Pasteur drew the strength of this genius? No; he went higher, he never forgot his Maker, and to Him alone he attributed the power of creation, never forgetting this great principle of chemistry: Nothing is lost, nothing is created. Yes, it is in the belief of a Supreme Being ruling the world above and below that he drew the moral strength of resisting some of the most pernicious theories that had been advanced in this century of material progress, and of proving experimentally the falsity of those erroneous assertions. In one word, Pasteur was a Christian believer, and it is Christianity which through his works confounded Darwinism and its spontaneous generation, nailed it to the grave, never to rise again.

The starting point, the fundamental point of departure was experimental work; this has been the basis of Pasteur's work, and for that reason it is indestructible. When asked where and how he had found the prophylaxis of rabies, this great genius cried out to the world: "Demandez le a la méthode expérimentale, seule elle a qualite de répondre." Ask it from the experimental method, she alone can answer you.

His debuts were very modest. He was always ready to listen to any suggestion that might advance him one step further in his studies; therefore his teachers proposed to him to investigate the crystalline form of chemical compounds. In this his genius manifested itself by the happy discovery he made, which led him to solve forever the problem of spontaneous generation. He found the molecular dissymmetry of these compound bodies being manifested by their geometrical forms and their optical properties; that is to say, their rotatory power. This discovery amazed at once an old professor who had spent all his life in that kind of study. He sent for Pasteur and put to him questions right and left. Biot was convinced, and in a burst of enthusiasm, said to him: "My child, I have so loved science in my life that your discovery fills my heart with joy and happiness."

From this he went on in his work of experimentation, always conducted with the most exact precision and clearness; he soon discovered microscopical beings, bacterias, vibrones of different kinds. The study of these germs led him to the theory of fermentation. Dissymmetry causes fermentation. Symmetry does not. Fermentation is always the result of a vital process. It proceeds from micro-organisms, which find their food in organic matter.

It was while he was engaged in those studies that in 1860 the celebrated controversy with Ponchet on spontaneous generation took place. In this Pasteur showed the religious character, the great vigor, the subtlety of his mind; he won the battle, and as P. Bert says, "spiked all the cannon of his adversary." Thus advancing deeper and deeper into the secrets of Nature, his genius took a new impetus. From fermentation he passed to diseases of animals first, and when everything had been clearly and experimentally demonstrated, gave to humanity the benefit of his results, and in this way was led to attribute to micro-organisms a role which has since revolutionized surgery, hygiene and medicine.

Indeed, purulent infection—septicœmia—fatal to so many thousands of unfortunate beings for so many centuries before, is not spontaneous phenomena, instantaneously developed in the human body. The strict methods of observation which Pasteur employed in the study of spontaneous generation, have given us the surest means of discerning that all the disorders that diseases cause to be present in the human frame are not the result of a mere accident, but of micro-organisms brought in by air, water, and sometimes the physician himself. These germs have been isolated; we have recognized their specific action; we also have found the way of stopping their progressive march; even more, of destroying them. Those ideas have transformed surgery and obstetrics; they have beyond all expectations reduced the mortality of men, and given to the physician an immunity and a daring unknown to that time. This progress in medicine, let us proclaim it aloud, owes its origin to the works of Pasteur. Thus the great problem of ages has been solved; the theory of spontaneity of diseases in medicine, as well as the theory of spontaneous generation, of which it is only a particular form, has lost its foundation and disappeared forever. If the great Virchow said: "Omnis cellula e cellula," we can also rightly say: "Omnis vibrio e vibrione," every cell, every vibrion of lowest vitality we can imagine, presupposes a living parent.

The cause, the origin of diseases had been found; in general micro-organisms were at the bottom of every evil in medicine; now the question was to proceed further, to investigate every disease, one after the other, to find its special causative agent, to fight it out, to eliminate it from the body, or, when already in the system, to attenuate its effec s and render the man less susceptible to its virulent action,

This was an altogether new and more complex problem to solve; but Pasteur hesitated not; assisted by the generosity of the French people he set out to work, and experimentally showed to the world that diseases are cured by the very agents that are the factors of them, thus applying to medicine the great principle of the distinguished Hahnemann: "Similia similibus curantur."

Has success crowned his works? It is useless for me to mention it. His discovery of the attenuation of viruses and their transformation into preventive agents will forever live, and lead to new discoveries that will in time enable the physician to combat more successfully the morbid effects of micro-organisms and thus prolong the life of man.

FERNANDO.

New York, December, 1895.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

Surgical Treatment of Diseases of the Stomach.—M. Doyen, of Rheims: The first operations of gastro-enterostomy in cases of ulceration of the stomach and of grave dyspepsia, date from July, 1892. Since that time the important role that spasm of the pylorus plays in gastric pathology has been demonstrated. The stomach, when empty, is vertical, and retains the food only by the reflex closure of the sphincter, the pylorus opening voluntarily when the chyme is sufficiently elaborated. Every important alteration of gastric chemistry, whether complicated or not with the round ulcer, is accompanied by reflex spasm of the pylorus. Hence it is that dilatation of the stomach, wrongly attributed to an atony of that organ, may have for its cause only habitual pyloric contraction. The records of cases cured through more than three years, of diseases of the stomach and duodenum, now number seventy-four, and it is from documents of incontestible value that the therapeutic results of our method may be known. I shall describe a new process of gastro-enterostomy, superior to all others for the evacuation of the stomach in the dorsal decubitus. The total mortality in our seventy-four cases was 22 per cent. Fourteen laparotomies—exploratory—in cancerous cases which had been pronounced inoperable, were not followed by a fatal result. Sixty cases comprised three pyloroplasties, with two deaths, two typical pylorectomies with two deaths, fourteen pylorectomies with gastro-enterostomies and five deaths, forty gastro-enterostomies with eight deaths, and one gastroplasty followed by cure. So that, in sixty operations, there were seventeen deaths, or 29 per cent. Since 1892 we have regarded with disfavor operations for cancer of the stomach. In the sixty operations above noted, they were practiced nineteen times, for cancer. Of these nineteen, nine were unsuccessful. Eleven pylorectomies for cancer, gave five failures, and eight gastro-enterostomies, four. These defective results are due to the fact that in nearly every instance, with probably the exception of two or three, there was a cancerous cachexia and the neoplasm widely diffused. Very different have been the surgical results in non-cancerous diseases of the stomach and duodenum, since in forty-one cases there were only eight that were unsuccessful, 19 per cent; the last due to the employment of an imperfect operative method or the advanced stage of the cachexia, many of the subjects being affected with phlebitis, ulcerations upon the sacrum or a cachectic œdema of the legs. In the cases that were cured, the results were very remarkable, and with the exception of two, who suffered with other affections, gastro-enterostomy, combined or not with closure of the pylorus, produced a complete cure of the most profound cases of dyspepsia with dilatation and ulceration of the stomach. All the recent results have fully confirmed the importance to be attributed to the non-evacuation of the stomach in gastric pathology. As soon as a new pylorus is created at an appropriate point, the pains cease. The patient may be nourished almost at once, and in the gravest cases of ulceration, cicatrization is established without causing the least hematemesis. Then, gastro-enterostomy may be regarded as the operation "par excellence" in non-cancerous diseases of the stomach. What method of operation is to be preferred? Our operative procedure of anterior gastro-enterostomy with gastric colopexia, has yielded but three failures in twenty-nine cases, 10 per cent. The results are very satfactory, if we remember that two of the failures were in patients affected with cancer of more than one third of the stomach, and the third patient had five gastric ulcers, and died accidentally from drinking a bottle full of lemonade, which caused a torsion of the stomach and strangulation of the new pylorus.

An autopsic examination of this last case caused regret that the posterior face of the stomach, which is inaccessible in ordinary gastro-enterostomy, was not explored. If we had had free access to the posterior face of the stomach, we would certainly have avoided every fatal accident, for the ulcers, invisible upon the anterior face, would have been recognized, and we should have been able to remedy the gastric retraction, which, located upon the posterior face, was unperceived during the operation. The idea has occurred to modify our operative method as respects the respective situation of the stomach, the colon and the jejunum. With the stomach lifted from the cavity, we then lift the great epiploon and detach entirely the middle part of the transverse colon, which is united to the epiploon by only a transparent peritoneal strip, but slightly vascular. Then suture the colon to the small curvature of the stomach, and practise posterior gastro-enterostomy.

This modification of the first procedure enables us at once to realize the benefits of the anterior and posterior gastro-enterostomy, and to insure a free evacuation of the stomach, which otherwise would remain dilated some time after the operation. In four cases we have had four successes.

M. Paul Berger communicated the results of investigations of 6,000 herniæ reported at the "Bureau Central." This valuable work is reduced by the author to a series of figures, only the principal of which we report. Hernia occurs three times more frequently in men than in women. It is inguinal in 96 per cent. of the cases, and a little more frequent on the right than the left side. Congenital inguinal hernia is the same as respects frequency. Crural hernia is rare in men, 6 per cent., umbilical the same, 5.46 per cent., and 27.34 in women. Herniæ of the linea alba and epigastric are much more frequent, especially in men, a fact not admitted heretofore. M. Berger gives in addition a record of the frequency of herniæ according to age and sex, with a very valuable history of etiological conditions.

M. J. Duplay presented in his own name and that of M. Cazin, a hollow metallic cylinder, to be used in suturing the intestines. It is introduced into the intestine like the button of Murphy, over which it has the advantage of volume. It has been applied eight times in the dog without accident, and this small and very ingenious apparatus gives much more light to the intestinal canal than the button, without the danger of retraction.

M. Hartmann reported three observations of splenectomy for movable spleen. The results were very satisfactory, and none of the consequences consecutive upon the ablation of the healthy spleen were observed, due to the fact that a movable spleen has already undergone some anterior pathological condition that caused its mobilization.

M. Michaux reported a case of volvulus treated by laparotomy. It occurred in a man of fifty years, who was operated upon five days after the beginning of the obstruction. A double torsion of the sigmoid flexure was discovered. After the removal of the torsion, the intestine, which was enormously distended, was cut to permit its reduction, and a complete suture of the intestinal wall effected. Fæcal matter and gas were evacuated by the anus half an hour after; cure was rapid. The author insists particularly upon free incision and a large opening for evacuation of the gas.

M. Guinard communicated a method of treating a sphacelated coil of intestine in the course of a kelotomy. Instead of making an artificial anus, or a resection of the intestine, to be followed by suture, which complicates the operation, he invaginates the sphacelated portion into the lower portion of the intestine, then sutures the sound border of the invaginated portion to the border of the lower portion, and allows the sphacelated coil to eliminate itself spontaneously. There is no opening of the intestine, and the operation is much more quickly performed.

M. Boiffin called attention to the necessity of prompt intervention in the surgical treatment of intestinal contraction, according to him, an entero-anastomosis. He cited a personal observation dating from 1890—patient still living.

M. Buscarlet reported a curious observation of perityphlitis, in which a laparotomy, practised five days after the beginning of the trouble, revealed nothing abnormal. However, a few days afterwards, an abscess appeared, which left after it a persistent fistula, kept up by a portion of the kernel of fruit. It had inflamed and perforated the appendix, and was not discovered at first.

Radical Cure of Inguinal Hernia in Children.—M. Phocas, of Lille: I have effected a radical cure of inguinal hernia in forty-eight cases, thirty-two of them aged from five years and under, twelve less than two years. The first part of this series of operations was published in 1893; since then I have performed twenty-three new operations, have never had a death, except in a case of strangulated hernia in an infant of six months. These figures, together with the statistics of MM. Felizet and Broca, testify favorably as to the radical cure of hernia in children. I divide inguinal hernia, as respects the opportunity for operation, into three categories. (1) Herniæ that must be operated upon. (2) Herniæ upon which it is not necessary to operate. (3) Herniæ in which one may operate. In the first category, I range the herniæ that are accompanied by accidents attendant upon irreducibility—a herniary cachexia. In the second I do not find the generally unfavorable condition an absolute contra-indication for the operation. I also think that large herniæ, strangulated and irreducible, should not be operated upon in very young children. The third category is that which has provoked the most general discussion. I advise the operation at the age of five months for poor children, and at the age of three years for the rich. After the trial of cure by the bandage, accessory circumstances often oblige me to operate after. I practice the operation after the usual method, with the following modifications; I always protect the inguinal canal, and do not suture the skin, carefully strengthening the deep surfaces with layers of catgut.

The concurrent accidents of the operation that I have observed are: Slight hemorrhage; irruption of the intestine externally; wounding the intestine. The post-operative accidents are: Secondary infection of the wound, hematonia of the cord and scrotum, and finiculitis. The most regrettable accident is the incomplete operation. Despite these accidents, the operative sequelæ have always been apyretic, and the ultimate results excellent, with very rare recurrence of the trouble. The radical cure of inguinal hernia in children, though benign, efficacious, and often indicated, is nevertheless a delicate operation, and one that requires to be conducted with method, cleanliness and rapidity, but above all in importance is the requisite knowledge in its performance; then its success seems to be assured.

M. Reynier remarked that the ligature of the epiploon used in hernia should be made of catgut. The most aseptic silk thread put upon an inflamed epiploon, may infect it and give rise to abscesses which enter the abdominal cavity with the epiploon, and for which a new operation may be required, generally the ablation of the inflamed portion of the epiploon.

M. Tillaux read a paper upon the treatment of tumors of the thyroid body. He favored partial thyroidectomy in cases of tumors of the gland, and in exophthalmic goitre.

M. Lentz presented a case of nephrolithotomy for a large calculus of the kidney, with cure.

M. Tuffier performed partial nephrectomy in two cases of renal tumor, removing a portion of the kidney up to the pelvis; compression of the pedicle prevented all hemorrhage.

M. Povisson: Value of surgical intervention in tumors of the bladder. The opening of the bladder is unanimously advised for tumors of that organ. Abrasion or enucleation of the neoplasms will effect a cure. Total or partial cystostomy will give no better results. When the tumor makes but slow progress, and is not distinctly localized, it is better not to operate, unless the symptoms are painful and of grave character.

M. Elado: In these cases the cystoscope is of great service, by determining the nature and conformation of the tumor. If the neoplasm is small and of malignant nature, it should be as largely resected as possible—in cancer every effort would be useless.

M. Aldabran: It is necessary to apply to the bladder the general rules of surgery, and only to operate if a large resection is possible. By applying the operation of lithotritz, in sixty cases of calculus, he demonstrated that this operation was good and effective, only one patient dying of anuria. Contra-indications may present themselves from the condition of the kidneys, the bladder, or prostate, but they are rare.

M. Jonnesco, of Bucharest: The hypogastric operation. Performed six times, five for calculus, one renal hematuria without appreciable cause—renal hemophilia. Of the five, one, an old man of seventy years, with an enormous calculus—300 gr.—died of double pneumonia on the third day. The remaining four were perfectly cured. There were small vesical fistulæ, cured in fifteen to twenty days. In all five the operation was performed longitudinally. In the sixth, the method of Trendlenbourg, with the double suture, was adopted. Reünion incomplete; fistula cured in fifteen days; hematuria ceased completely after the operation. These six operations prove the following facts: 1st. The hypogastric is a simple operation. I have never encountered the peritoneum. Petersen's "balloon" is absolutely useless. 2d. The suture of the bladder is always indicated unless the bladder is profoundly diseased and the urine purulent. When the total reunion of the vesical wound is not obtained, there is only a small vesical orifice, instead of the large wound necessary to extract the calculus or explore the vesical cavity. 3d. Vesical fistulæ form with great rapidity. 4th. Urinary extravasations in the cavity of Retzin are not serious, and easily yield to simple irrigation of the cavity and the drainage of Mikuliez. 5th. The hypogastric is preferable to the perineal operation, even in children. 6th. The longitudinal to the transverse operation of Trendlenbourg, which is bad, because of the difficulty of securing perfect reunion of the abdominal wound. 7th. The hypogastric operation is indicated in obstinate hematuria without appreciable cause, which soon ceases after it.

Pathogenesis, Diagnosis and Treatment of Vesical Tuberculosis; Two Observations of Phosphatic Gravel.—M. Lavaux: In two cases the vesical calculi were found to be of phosphatic nature. For the phosphate of lime to be deposited in the bladder in this form, it must be agglomerated by the mucus. In the two cases presented, this was furnished by tubercular alterations of the bladder, with very marked digestive troubles.

Prostate-Retrograde Catheterism.—M. Roulier speaks highly of the good effects of *retrograde catheterism* in prostatic affections. Of the facility of this method and its good effects, he says: Struck by the excellent results obtained by cystostomy in prostatic congestions, I thought that opening the bladder would exercise in this also a good influence, and I hoped at the same time to be able to re-open the canal and maintain its permanency by a sound. In two cases I practised supra-pubic cystotomy, which was made very easy by the morbid repletion of the bladder. I made a very small incision into the bladder, and through it, with the index finger as a guide, easily conducted to the meatus a bougie, No. 20, and by it readily passed a sound of the same calibre.

I wish to draw your attention here to a small modification of the technical method, in order to pass the suspensory threads that are so necessary for the subsequent steps in the operation. With Reverdin's short needle or Hagedorn's, and before incising the bladder, I pass two threads parallel to the future incision of the bladder, and distant from it—that is from the median line—about one centimeter. The two threads passed and knotted, I make my incision between them, so that the bladder is, at the same time, opened and suspended. In these cases, an opening of two centimeters into the bladder was sufficient, the index made the physical exploration, felt the prostate, its projections, the calculi—when there were any—and finally, the neck of the bladder wide open. Nothing is easier than to glide along the finger a bougie, engage it in the vesical neck, and, by gentle pressure, pass it into the canal and out at the meatus. An assistant inserts a sound into the end of the bougie, secures it by a silk thread, then the two, bougie and sound, are drawn back, and the sound left in the bladder. As it often happens in old prostatics that the permanent sound will be expelled, however careful may be the precautions against it, I pass a silk thread through its two eyes, draw the ends out at the hypogastric wound, and so provide against accident. Then a light dressing, no applications to the sides of the bladder; in a word, I make a cystotomy, and not a cystostomy. My two patients were cured, their hypogastric wounds healed and closed, one on the twelfth, the other on the seventeenth day. One of them continued to sound himself, which he easily did, night and morning. The prostate of the other was so large and so inflamed that I thought it my duty to ligate the vasa deferentia. The result was perfect. He now urinates and empties his bladder without the sound. Five times have I had occasion to tie the vasa deferentia to remedy prostatic congestion, and always satisfied myself of the superiority of this operation to castration.

Surgery of the Limbs: Systematic Abstention in Crushing Accidents to the Limbs.—M. Reclus proposes a conservative force that is revolutionary. After most careful cleansing of the parts that have been terribly injured, and after thorough asepsis of the wounds, he embalms the crushed limb and makes a compressive dressing, to be of long duration. It is often surprising, on removing the dressing many weeks after, to see that Nature has been more sparing than the surgeon, and that the sacrificed parts are reduced to a minimum. He cites five observation of serious crushing, which would have necessitated more amputations than the wounded could have borne, and is convinced that their lives were saved by his conservative method. M. Reclus advises the injection and dressing with anti-tetanic serum, to protect the patient from that terrible infection.

Serotherapy in the Treatment of Cancer.—MM. Hericourt and Ch. Richet, in a communication to the Academy of Sciences, made on the 29th of April, explained a new method of treating cancer, from an observation made upon a case of sarcoma. The method consisted of injecting around the tumor serum taken from an animal that had previously been inoculated with cancerous fluid from malignant tumors. Since then they have made numerous new experiments, and are entirely in accord, as are also other clinicians who have experimented with the same method, and who agree upon the following effects: First, the pains diminish; after the first injection there is an almost immediate subsidence of the pain, which continues during the treatment and after its interruption. Second, the ulcerations are ameliorated, and the tendency to hemorrhage is lessened rapidly. Third, the tumors diminish in volume. Fourth, the evolution of the disease is retarded. Fifth, the general condition is improved. But, unhappily, the amelioration does not go on to a cure. At the end of a month or two the tolerance of the effects of the serum is established, the general and local conditions, instead of gradually continuing to improve, remain stationary, finally to return, slowly, it is true, to the point of departure. By combining this method with a surgical operation, the return of the malady may perhaps be prevented, or at least retarded. Finally, if the serotherapic treatment cannot radically cure neoplasms, it rapidly ameliorates them, and to a degree incomparable by any other treatment known.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Orchitic Extract.—Dr. H. Grey Edwards, (*Brit. Med. Jour.*), has given the extract, in a large number of cases, with excellent results. He says that all cases of nervous disease, without organic lesions, which are benefited by bromide of potassium, will receive ten times as much good from orchitic extract. In old men in whom the system suffers from the want of the vital fluid secreted by the testicle, which would be reabsorbed into the blood in a new form, the extract is of great value, enabling them to devote themselves to business with increased vigor, and to endure much more physical exercise than they were capable of doing prior to taking it. He cites several cases which he considers types of the conditions which are benefited by this treatment. In a case of impotence in a man, although the tabloids were of no value as regards the impotence, the patient soon felt stronger and more energetic.

Gelsemium for Dislocation of Patella.—Dr. James B Combs writes to the *Medical Brief* that he has relieved several cases of tendency to slipping of the knee-pan, originating in muscular weakness, by the administration of gelsemium tincture, three to five drops, once only, or, in chronic cases, once daily. One of the cases he bandaged. He asks: "Are not these relaxations of the muscle connected with sexual functions?"

Sprain Treated by Massage.—Dr. A. E. Gallant writes to the *Medical News*, April 30, 1895, that 1,231 recent cases of sprain, including every variety and degree, were treated under the direction of Prof. Van Arsdale in the Good Samaritan and Eastern Dispensaries. The best and quickest results were obtained by beginning massage immediately after injury, but neglected cases and those treated previously by immobilization will respond and give satisfactory results. His method for applying massage to a sprained ankle is as follows: The patient is placed either upon his back at full length on a low table, with his head on a pillow, or upon the abdomen, with the legs relaxed. The entire foot and leg are then moistened with a mixture of equal parts of ol. hyoscyami coct. (Ph. G.) and pure chloroform. Beginning well above the swollen portions of the limb, gentle, systematic upward strokes are carried above the knee. Both hands are held parallel with the sides of the legs, the pulp of the fingers being used for the first strokes, then the palmar surface is brought in contact with the skin, and long, slow strokes, which include the whole circumference of the leg, are made, the force of the pressure being increased until it is finally necessary to grasp the heel and make counter-traction in order to steady the limb. When the leg shows evidence of depletion of venous blood and lymph the strokes may begin lower down, and more directly over the seat of injury. Whenever the superficial veins that were first emptied appear engorged the massage of the upper leg must be repeated, in order to evacuate the newly imported supply of blood and lymph well into the vessels of the thigh. The regions of hardness, stiffness and soreness are sought out and made the special points of attack. Finally, the strokes are gradually made more gentle again, and, becoming longer, extend from the foot well up to the knee. When the seance is ended the patient should be entirely free from pain.

Massage of the limb should be made twice daily, morning and afternoon, for half an hour at a time. After massage rest the joint for half an hour, and then permit the use of the limb in walking. The only contra-indications mentioned are that massage should never be applied in bacterial inflammations—*i. e.*, tuberculous, gonorrhœal, or pyæmic joints.

The author concludes that massage of sprained joints will: (1) Prevent swelling, or rapidly disperse it if present. (2) Prevent pain, or quickly remove it when due, as it must be, to tension. (3) Prevent stiffness, or overcome it when already present from disuse. (4) Prevent the sense of weakness, and restore the part to its original vigor and strength. (5) Reduce the time of treatment from *weeks* to a corresponding number of *days*. (6) Permit the immediate use of the injured member.

The Form of Electricity Best Adapted to the Relief of Pain.—Dr. A. D. Rockwell, in a clinical lecture ("Neurasthenia *vs.* Lithemia," *Intern. Clinics*, Vol. III. fourth series), says: In differentiating between the two forms of dynamic electricity for the relief of pain, I have often noticed that when the parts were sensitive to pressure the galvanic current was the most effective, and when pressure was grateful and afforded relief the Faradic current seemed to be indicated.

Treatment of Cancer by Injection of Alcohol.—Dr. J. W. Young writes in the *Charlotte Medical Journal:* "For several months I have been injecting alcohol, with a common hypodermic instrument, into various tumors, and I have been surprised many times at the rapid diminution in the size and appearance of the mass. I find that if too much alcohol is injected at any one time there is a little danger of the sloughing of the subject, but with ordinary caution there is little danger of these accidents. My plan is to inject ten to twenty minims in one side of the tumor, then as much in another place, and continue until every part is touched by the alcohol. My aim is simply to get absolute alcohol in small quantities on every abnormal cell in the neoplasm, and I do not use in all more than one or two drachms at one sitting. I am of the opinion that absolute alcohol blights the cancerous cells of every variety, and destroys their proliferating power, and if used before the cells are disseminated through the system a permanent cure can be made by this means. I have injected pure alcohol in a cancerous cervix, getting a little alcohol to every diseased part, and have watched them apparently get well. If there is sloughing in a part of the cervix after injecting, I pack around and in the cavity gauze wet with this remedy, and have seen healing take place when I did not expect it. My plan is to inject tumors every third or fourth day, waiting each time long enough to be sure of the results of each injection before using the next time. The pain produced is sometimes quite severe, but most individuals will endure it when given to understand that a cure is likely to result without the use of the knife or caustics. Cocaine can be used, if necessary, with a sensitive individual, without detriment to the action of alcohol on the tissue. The purer the alcohol the better, but I am in the habit of putting a small lump of unslacked lime in a four-ounce vial of alcohol, and I find this renders the drug nearly pure, and answers the purpose."

RETROSPECTIVE DIETETICS.

The Ladies' Home Journal, that popular and interesting monthly, which is doing a vast amount of good in our homes, is publishing a series of articles on "Dietetics," which are open to severe criticism, because they are misleading in some respects, and in certain others unsafe as guides.

It is not safe for a layman to advise as to "How to reduce your weight," for it takes an experienced and competent physician to do this successfully and without danger to the patient.

The layman is thoroughly incompetent to prescribe in the important department of dietetics, because of his lack of knowledge of chemistry and physiology; just as well might he attempt to administer drugs of which he knows as much. Few physicians have given the subject that careful study which will enable them to advise intelligently, scientifically and practically, in this important specialty. We say *specialty*, because the subject is being studied and appreciated as such by those who are in a position to realize its importance.

The unbalanced adviser who prescribes the same diet for every one is absolutely unsafe, and should be avoided. It does not matter whether it is the crank who always prescribes a lean meat diet, with or without a methodical use of drinking water, or whether it is the one-sided sectarian who finds the all-in-all in his carbo-hydrates, or his hydro-carbons, as the case may be; they are all dogmatic and not to be trusted.

There are few articles of food upon which a human being would not starve in a given time, unless the article were modified or associated to suit nutritive requirements, and still there are occasions when any one of these agents may be required to bring up the balance to the normal, but it requires both knowledge and experience to be able to bring about this result.

A vast amount of ignorance and prejudice are shown by writers in the consideration of special articles of diet. They write as if they supposed an individual was going to attempt to live upon some one of these articles. It is from this standpoint that the potato, for instance, is condemned, regardless of its constituents.

The potato, like everything else, is useful for just what it is worth in proximate principles, and nothing more.

Another point which is open to severe criticism is the character of the abominations called foods, which are palmed off upon the readers of magazines and other periodicals under the head of cookery. Many of these conglomerations are not suitable as pabulum for any order of animal life, to say nothing of human beings.

The object of the cook is to tempt the palate to unpardonable sin, and it should not be the province of the respectable newspaper to perpetuate the immorality.

Germs in Condensed Milk.—*Good Health* says: "The general supposition that condensed milk is sterilized milk is by no means correct. There is certainly great difference in the products of different manufacturers. Condensed milk often contains microbes, which, if not actively growing in the milk, are ready to grow when the milk is diluted and taken into the stomach. When the condensed milk is slimy, cheesy or semi-solid in character, it contains germs which are actively developing. These germs are from the sources which ordinarily contribute to the contamination of milk. The only safe way in the use of condensed milk is to sterilize it, by the same methods employed for sterilizing fresh milk. As a rule, condensed milk requires sterilization as well as ordinary milk, although it must be said that generally there are fewer microbes to be found in condensed milk than in fresh milk as furnished by the milkmen."

Modified Milk.—The average family physician will be apt to sympathize with Dr. Worcester, of Waltham, Mass., in his satisfaction at having at last found a perfect substitute for breast milk. It is produced by the Dresden process, the details of which he gives at considerable length. Briefly summarized, this consists of the addition of the white of one egg and 13 drachms of milk sugar to one pint of cow's milk, of 9.5 per cent. richness in fat, and one and a half pints of water. The milk sugar is slowly added and thoroughly mixed with the egg-white, taking care not to beat air in the mixture, for egg foam will not mix well with water. To the paste so made, a pint and a half of water is slowly added, stirring constantly. This emulsion is then strained through fine linen into the sterilized milk, which has also been previously cooled down below 100° F. Slight stirring or shaking will now complete the mixture, when it may be poured into the required number of nursing bottles. These, stoppered with sterilized cotton, can then be kept cool, and warmed as needed. If sufficient care is taken in preparation, the mixture will keep for days and even months.

Relative Digestibility and Nutritive Value of Oleomargarine and Natural Butter.—Although the statements made as to the relative food value of natural butter as compared with oleomargarine have varied, yet the general outcome has been that, while there was not much choice between them, yet, as a whole, butter had a slight advantage. This has led Dr. Adolph Jolles (*Sitzbericht*: *Kaisl. Akademie in Wien*, 6th Maerz 1894) to carry out a long series of observations upon dogs fed during four consecutive periods alternately with natural butter and with oleomargarine. From the results of this experiment, in which proper care was taken to have all the conditions similar, it appeared that natural butter and manufactured oleomargarine had practically identical coefficients of digestibility and nutritive value.

Ice-Cream in Pneumonia.—In some recent articles in the *Therapeutic Gazette* on the treatment of acute pneumonia (*Pract. Med.*), the author calls especial attention to the great importance of the food and drink. He says that at least nine-tenths of the food should be in the liquid state. The greatest care should be taken that the patient does not get too much liquid, for if too much water accumulates in the vascular channels the circulation will be oppressed, especially in cases of cardiac insufficiency. One food which may also be called a drink, and of which the patients seldom tire during the whole course of the disease, is ice-cream. It can be flavored to suit the taste, is a highly nutritious food, takes the place of ice or water, cools the stomach and allows better digestion, and helps to reduce the temperature. If, however, the thirst is intense, there is nothing which will relieve it better than to allow the patient to suck a little juice from a piece of lemon every fifteen to thirty minutes. This not only quenches the thirst, but it also puts the mouth in excellent condition for food.

Peanut Flour for Diabetics.—Dr. Heinrich Stern writes in *Food and Sanitation* regarding the importance of suitable breadstuffs for the use of diabetics. The complete and sudden deprivation of breadstuffs, he says, undoubtedly produces more harm in a diebetic patient than a moderate use of such articles, and to stop the saccharine supply completely is not what is wanted. So-called diabetic flours he has examined contain large quantities of starch, as it seems beyond our means to extract it to a certain degree from the grains in use. After many experiments he has decided that a suitable meal may be obtained from the peanut, which is very nutritious, but contains a very small proportion of carbohydrates. The kernels, including their inner coating, which is very nutritious and not very abundant in carbohydrates, are put in a tin kettle, in which small holes have been previously made. This is kept uncovered and placed on or into a pan filled with water, and this has to be kept boiling for about half an hour, to allow partial extraction of the superfluous oil. After the kernels have been dried, they are pounded into fine particles with the aid of a rolling pin. The pounded or bruised kernels are then placed in boiling water, acidulated to some degree with tartaric acid or vinegar, preferably the latter. The boiling in the acidulated water has to be continued for some time, for different reasons. Having undergone a thorough boiling with acidulated water, the ground kernels are subjected to dry heat, to effect complete evaporation of that fluid; but great care must be exercised that they do not become browned or roasted. An additional treatment with the rolling pin will produce nearly as fine a flour as the common wheat flour of commerce. The most simple process of extracting the oil, when manufacturing the flour on a large scale, is by pressure, either by the employment of the cold or the warm process; the pressure can be so regulated as to extract just the amount of oil that is not wanted. Dr. Stern has made use of the flour in different ways, the most simple of which is in the form of a porridge, some milk being added to it. Bread and biscuits can also be baked from it, but the nicest and most easily digestible form in which to utilize it is, he thinks, the German pancake. Every housekeeper understands how to make the latter, and a tasty and always fresh piece of pastry can therefore be produced on short notice.

MISCELLANY.

—Linseed oil is said to be a sure remedy for both hard and soft corns.

—First sign of tuberculosis is the daily acceleration of pulse from a half a dozen to a dozen.

—Dr. B. G. Carleton has been appointed Genito-Urinary Surgeon to the Metropolitan Hospital, B. I.

—Boro-glycerine, about one part to six of water, used as a spray two or three times a day, is an admirable remedy for ozæna.

—Dr. Greely says of the seventeen of his men who died on his trip to the North Pole all were smokers but one, and he died last.

—The *Post-Graduate* asserts that "the bicycle has cut down the scientific activity of the New York profession at least 50 per cent. already."

—A 10 per cent. solution of cocaine was recommended at a meeting of the London Obstetrical Society as a most effectual application to secure the dilatation of rigid os in labor.

—Dr. Furseno, of Copenhagen, believes that the adoption of the "red room" in the treatment of smallpox will reduce the mortality, shorten its duration, and prevent the formation of scars.

—The healthiest place in the world appears to be a little hamlet in France named Aumone. There are only forty inhabitants, twenty-three of whom are eighty years of age, and one is over 100.

—Carbon dioxide is proposed as a food preserver. It is said that foods stored in an atmosphere of this gas are preserved indefinitely, the natural freshness and flavor being retained better than by the use of ice.

—Prof. Hebra, of Vienna, insists that the sun does not produce freckles. They never appear, he says, in the newly born or in children under the age of six or eight years, whether exposed to the influence of the sun or not.

—Dr. S. Weir Mitchell has been honored with the degree of LL. D., by the University of Edinburgh. In the announcement from the authorities there, he is referred to as "the chief ornament to medical science in the New World."

—Dr. W. H. Bates reports in the *Medical Record* four cases of painful vision which persisted when gold-framed spectacles were worn, and were relieved by preventing contact of the gold with the skin by interposition of paper or vulcanized rubber, and by change to steel frames.

—The University of Budapest, in response to an inquiry addressed to it by the Minister of Instruction, has expressed the opinion that women should be admitted to the classes in the medical and pharmaceutical faculties, and should be eligible for degrees in those subjects.

—Dr. Beclere finds that excellent as are the results of the thyroid treatment, it is nevertheless attended with certain risks. The thyroid juice, when ingested in large quantities, acts as poison on the heart, as is proved by the sudden deaths which have supervened after ingestion of the thyroid gland of sheep.

—Dr. C. Mansell Moulin (*Journ. of Anat. and Physiol*) considers the prostate to be an accessory organ of generation, and as having nothing to do with micturition, and but a secondary connection with the urethra, its function being to add certain constituents to the seminal fluid, at the time of its discharge, which serve to arouse and maintain the slumbering vitality of the spermatozoa.

—The *Journal of Insanity* opines that "genius oftentimes seems to have about it a touch of madness, and insanity sometimes shows streaks of genius, but the relation between the two is accidental, not essential. If this has been said before, it will do no harm to say it again, as an antidote to the mixture of each to which Nordau and Lombroso and others are just now treating the civilized world."

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ORIGINAL ARTICLES.

PSYCHOLOGY OF THE UNCONSCIOUS.

By David Allyn Gorton, M. D.,
Brooklyn, N. Y.

Author of "The Monism of Man," Etc.

I.

IT has been customary wrongly to confine the sphere of the psychical to the moral and intellectual faculties, faculties commonly regarded as having their seat in the head, excluding altogether from this dignity the animal kingdom below man. The synonym for the word psychical in modern speech is soul, or its equivalent, meaning the thinking, emotional, and willing powers, or comprehensively, consciousness. It is true that the term psychical was given a broader significance by the mighty Aristotle, in whose fallow brain the term was conceived; but the influence of the scholastic philosophy of the Middle Ages had the effect to narrow it down to that supposed something within us which is, in scholastic phraseology, "related to the Infinite," excluding from such relation the sensuous life of the body, and accepting only the ego, or conscious mind—the immaterial. Thus was the monistic conception of the great Stagarite over-borne by that of the dualistic, namely, physical and psychical, the one, material and finite; the other spiritual and God-like.

It is not worth while to say that the dual hypothesis was born of the intuitions; nor that it seems destined to share the fate of other hypotheses of similar origin, for only what is true can endure. Among modern scientists a tendency may be observed to return to the view of Aristotle as to the unity of man's nature. It is in fact difficult to escape from the conclusion to which modern investigation leads one as to the essential unity of the physical and psychical in every department of being. In the larger view, body and mind are one and inseparable, animated by the same principle, the Unconscious, and although the functions of different parts of the body may differ, each after its kind, all are dominated by the laws of the Unconscious. Mind of some kind or other is the originating and dominating force in all. The mind of the grey cerebral substance is one, embracing consciousness; the mind of the white nerve-substance is another, involving the Unconscious. The cerebrum may be the "dome of thought," and the flower of the nervous system, the seat of the intellect and imagination; the cerebellum may be the source of feeling, the sentiments and emotions, which form the larger part of man's mental life; but the spinal cord is the presiding genius of muscular sense and muscular co-ordination, which is not less mental, although of a different or lower quality. Moreover, the sensory ganglions may minister to the requirements of intelligence; the excito-motor ganglions may preside over muscular impulses and execute the mandates of the will; but the ganglions of the grand sympathetic lie at the very root and spring of being, without which man could neither be nor exist, feel, will or think. The grand sympathetic ganglions are related to the Unconscious life or mind, which is a part of the Universal Life and Mind. They minister to the wants of animated creatures, and constitute the psychical life of body and brain. The functions of nutrition, respiration, circulation, secretion and excretion, of the special senses, as well as the process of repair and health, are carried on and conducted by mental forces derived from the grand sympathetic. Nor is this all. To this source may be traced man's perception of his relations and environments, which enable him to choose that which is good for him and to avoid that which is harmful. He is wholly subject to the laws of this part of his nature—the unconscious part—and is governed by them, both in his individual and his collective capacity, as certainly and unerringly, when left to their influence, as any other part of nature, animate or inanimate. It is true, moreover, that animals so low in the scale of being as to be devoid of sympathetic ganglia, or to possess even the rudiments of a nervous system, exhibit remarkable degrees of intelligence, and are governed by the laws of the Unconscious in a manner more certain than is man himself. Facts of this kind are so numerous and extraordinary that Von Hartmann is led by them to the conclusion that among these low orders of being the psychical condition their organisms, rather than that their organisms condition the psychical. In other words, the Unconscious will creates and makes use of such mechanisms as may be expedient, as means to ultimate its desired ends. That is to say, the Unconscious is first, and the organism is last in the relation of cause and effect. It is a short-sighted philosophy, therefore, that excludes the functions of the sympathetic ganglia, or any part of the nervous system of animals, from the category of the psychical and turns them over to the sphere of the inanimate and material.

But what evidence is there in support of these propositions? The close observer may find in all the kingdoms of Nature, the mineral, vegetable and animal, indubitable evidence of the existence of mind, or a psychical principle, animating each, and working out in each a definite idea and purpose. This psychic principle is not confined to nerve substance, nor even to protoplasm. But let us confine our observations to the animal kingdom and begin with the lowest form of organic substance—protoplasm. This shows sensibility to the light, and will, like plants, make voluntary efforts to get itself into the light. The polype knows the difference between living and dead infusoria, and manifests aggressiveness in seeking nutriment—that is, it will contend with other polypes. Von Hartmann says that if living infusoria be placed in water within a few lines of the polype, "the latter perceives it—God only knows how—and produces a whirlpool with its anus in order to draw it within its grasp. On the other hand, should a dead infusoria, a small vegetable organism, or a particle of dust, approach quite as close, it does not trouble itself at all about it."* It is needless to say that no physiologist has ever found the least rudiment of a nervous system in the polype. The hydræ may be divided and sub-divided without destruction, each piece becoming a new animal. So, likewise, it is with the annelids, or worms, only in a less marked degree, each transverse section only, becoming a new worm. It is interesting to observe that in these instances the head of the worm is renewed first, then the tail. This fact leads Von Hartmann to observe that since each section of the divided worm "always furnishes a specimen manifesting the typical idea of its kind, this effect cannot be due to a dead causality, but the type-form must be present in each piece of the animal." "Every fragment of the animal," he continues, "must have the unconscious image of the type according to which it accomplishes this regeneration."† It is difficult to ignore this conclusion of Von Hartmann. In the process of this regeneration may be observed the gradual development of the organs of the head, "its closely packed rings, expanding on all sides," "prolongations of the digestive canal, the vascular system, and the ganglionic cord"—organs which have nothing in common with the part from which they spring, the development of which is quite inconceivable, except on the assumption of the existence of an innate ideal or mental factor.

As wonderful as this phenomenon is, it is nearly equalled by the powers of reproduction of other species of the lower animals. Spiders throw off injured legs and regenerate them. So do crabs. Fishes likewise regenerate their fins; lizards their tails. The Asterias reproduce their rays; so do snails and beetles their injured and lost antennæ and tentacles. Pigeons, according to Voit, have been known to regenerate their destroyed cerebrum, together with its function. Birds renew lost feathers, fishes their injured scales, and frogs their broken legs. Equally wonderful are the physiological exploits of the Holothuriæ which inhabit the South Sea. According to Von Hartmann these animals "devour coral sand: and if they are taken from their native haunts and transferred to clear sea-water, they of their own accord, eject from their bodies the intestinal canal, with the brachiæ and all other organs connected therewith, in order to form new viscera more in harmony with their altered medium." *

Some species of animals, belonging to the lower orders of the vertebrata, manifest powers of regeneration of lost or injured parts almost equalling in marvelousness those of the Annelida. For example: "Spallanzani saw among salamanders the four legs with their ninety-eight bones, besides the tail, with its vertebræ, reproduced six times within three months; in others, the lower jaw, with all its muscles, vessels and teeth, was regenerated." The eye, in this species, according to Blumenbach, has been known to reproduce itself when the optic nerve escaped injury and a part of the membranes of the eye remained intact. Would any one dare to deny that these marvels of conservation and repair are not due to psychic power?

These phenomena of unconscious minds are classed by physiologists among examples of reflex influence—an explanation which does not explain. We shall return to the subject further on, in connection with the same class of phenomena in man. For the present, let us proceed to consider the evidence of psychical actions in the phenomena presented by instinct, so-called.

Take, for example, the phenomena presented by ants. This animal is supplied, of course, with the rudiments of a nervous system, but it is totally devoid of a cerebrum, and, therefore, of an organ of consciousness. Nevertheless, he exhibits many of the psychical powers of man, such as building a place of refuge, providing homes, food, protection against enemies, making war, holding slaves, having caste distinctions, etc. They exhibit remarkable sagacity in treating their wounded, as do the wounded extraordinary powers of recovering from wounds. Latville cut the antennæ of an ant, whereupon other ants came and covered the wound with a viscid fluid, secreted by their mouths. Moreover, ants make use of ambulances in carrying off their wounded in battle, and were probably the first to invent that contrivance for transferring the wounded.

According to Pierre Huber, an authority on this subject, vouched for by Darwin, the habits of the various species of ants differ greatly, as likewise do the habits of members of the same species. Some species make the female do the work; in others, the burdens of life are borne by the males; some species are war-like; others, peaceful. Some species are slave-holding, and live in genteel leisure, making their slaves do the toiling; while others work with their slaves; other species do not indulge in slave-holding, but do their own work. "In Switzerland," says Darwin, "the slaves and masters work together, making and bringing materials for their nests; both, but chiefly the slaves, tend, and milk, as it may be called, their aphides; and thus both collect food for the community. In England, the masters alone usually leave the nest to collect building materials and food for themselves, their slaves and larvæ, so that the masters in this country receive much less service from their slaves than they do in Switzerland."* The species above observed by Darwin was the *formica sanguinea.*

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* Philosophy of the Unconscious. I., p. 63.

† *Ibid.*, p. 144.

* Philosophy of the Unconscious, I., p. 146.

We cannot forbear to note in passing some curious observations of Huber of the remarkable social customs of the *formica rufescens.* "This ant," says Darwin," is absolutely dependent upon its slaves; without their aid the species would certainly become extinct in a single year. The males and fertile females do no work of any kind, and the workers, or sterile females, though most energetic and courageous in capturing slaves, do no other work. They are incapable of making their own nests, or of feeding their own larvæ.† So utterly helpless are the masters of these animals that when Huber shut up thirty of them without a slave, but with plenty of the food which they like best, and with their own larvæ and pupæ to stimulate them to work, they did nothing; they could not even feed themselves, and many perished of hunger. Huber then introduced a single slave (*F. Fusca*), and she instantly went to work and saved the survivors." ‡

These remarkable phenomena the great Darwin seemed content to class as instinctive, though he could not do otherwise than to marvel at them. Since instinct, according to the physiologist, is "purposive action without consciousness of the purpose," the conduct of the *formica rufescens* may be instructive. But whether due to instinct or not, it is mental and, therefore, psychical; since, also, it is not due to conscious volition, it must be due to unconscious volition, the existence of which among all species of animals is maintained by Hartmann. Nor is it, indeed, confined to animal life.

Next in the order of Unconscious intelligence stand the mental phenomena of the hive-bee. They are closely allied to those of the ant, and are too well-known to be more than referred to here. Without a cerebrum, possessing nothing comparable to one but sensory ganglia, the bee has never ceased to astonish the physiologist by the number and variety of its "purposive actions without consciousness of its purpose." The bee, however, does not confine its actions to the sphere of instinct as recognized by the typical physiologist, for it does not conform itself to fixed rules, or a regular, uniform method. For example, Huber, by special contrivances, prevented bees from carrying on their instinctive mode of building from above downward, whereupon they built from below upward, and even horizontally, conduct more complicated than that typical of instinct. The sense of instinct is better illustrated by the actions of a caterpillar, observed by the same author, which, having completed its hammock to its third stage, was put into one already completed. It seemed at first much embarrassed by the new situation, and finally was forced to go back to the point of its own hammock, at which it had itself left off, executing anew the fourth, fifth and sixth stages, which had already been wrought out.

The bee, moreover, performs other acts, which are above instinct, in the usual conception of that term, for it carries on operations which require the co-operation of other bees and a guiding, directing mind, very much like similar operations among men, even to the division of labor. For instance, in constructing its hives the bee works in gangs, in a manner altogether similar to works which require joint combinations of men, under a single head or leader, one bee confining itself to a particular kind of work, as excavation, another to wall-building, another to the ceiling, and so on to the number of a score or more workers, in the completion of their marvelous work, which is all the more marvelous of them by reason of absence of language, or other visible means of communication among the workers. Surely no operation of conscious intelligence is more extraordinary than this, which is carried on, not by the bees really, but *through the bees*, by the laws of the Unconscious.

A higher and equally interesting order of instinctive phenomena, due, as the physiologists would say, to the presence of sensory ganglia, is observable among the higher vertebrates, the domestic fowls, for example. The chick breaks its own shell, in which it is hatched, with the tip of its bill and helps itself into the external world, gets on to its legs and forthwith begins to peck at insects, seeds, etc., with unerring aim. In this connection the experiments of Mr. Spalding, of England, are *apropos.* This gentleman continued to have chickens hatched and kept secluded in a bag for a day or two, when on being taken out they would almost immediately "set off straight for the box in answer to the call of the hen, though they had never seen her and had never before heard her voice." "This they did," he observed, "struggling through the grass and over rough ground, and when not yet able to stand steadily on their legs." The same writer remarks that a turkey but ten days old, which had never seen a hawk, was so alarmed by the note of one secreted in a cupboard "that it fled in a direction opposite to the cupboard with every sign of terror." *

Of the habits of most animals which are supposed to be guided by instinct, unconscious intelligence would afford a better explanation, since such animals adopt unconsciously the proper means to a desired end—these means constantly varying according to varying circumstances. For example, in cold climates, birds sit on their eggs in order to hatch them; in warm climates they leave them to be hatched by the sun, because, as Von Hartmann says, the bird "sees the goal of its instinct attained without its assistance." When circumstances are such as to place its eggs or their little ones in jeopardy, the birds hide their nests, some in the sand, others in caves, holes, thick foliage, shrubs, grass, etc. "In South

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* Origin of the Species, p. 216.

† *Ibid.* p. 212.

‡ *Ibid.* p. 212.

* *Macmillan's Magazine*, Feb. 1873.

Africa the sparrow begirds its nest with thorns as a protection against snakes and apes." How different, too, are the styles of nest-building among birds of the same species.—in the mode of building, materials used, place of building, etc., the best means to the desired end being usually kept in view. Some birds, moreover, build no nests at all, resorting to other and less troublesome but equally effective means of caring for their brood. The cuckoo, for example, deposits its eggs in the nests of other birds, to be hatched and tended by them. They hide their eggs, so to speak, among the eggs of other birds; and what is most remarkable, although its eggs are of different color and sizes, among the various species of cuckoo, each cuckoo lays its eggs in nests of birds whose eggs are as nearly as may be of the color and size of its own. Otherwise the device would fail and the end be defeated.

"Instinct is the voice of God," said Kant, to which Von Hartmann responds, yes—"the God in one's own breast, the immanent God." * No one with an adequate conception of the marvels displayed by these low species of being, in adapting means to ends, can fail to be impressed by them as was the illustrious Kant. If it be not God, it is a psychic power possessing the attributes which one ascribes to God. One cannot escape from the conclusion to which these phenomena lead, namely, of the existence of a power behind them having an inflexible purpose, intelligent, and yet unconscious, and working out for them a destiny fixed and irrevocable. In the mammalia the law of the Unconscious is equally manifest, though it impresses us with less significance, for the reason that we recognize in the mammalia the existence of conscious intelligence. This, however, takes little part in the instinctive, or unconscious actions performed by them, except, as in man, to interfere with the law of its perfect fulfillment. The habits of every individual of this species, below man, are under the direct influence of the Unconscious, and are regulated by it with not less certainty than are the functions of organic life. Many of them provide against inclement weather and the contingency of want, by storing food and building places of abode and refuge—securing themselves against want, cold, storms and their enemies. They choose such food as is best suited to them with the same degree of certainty that Nature shows in digesting it, and reject improper or injurious articles of food with greater sagacity than that aforded by conscious intelligence. So likewise, in protecting themselves against morbific causes, as infection, they instinctively resort to such measures as science has shown to be the more efficacious, namely, cleanliness. They show a remarkable degree of clairvoyance as to death, time of delivery of their young, weaning, etc., a kind of foreseeing in which man is deficient. The female of the house-cat, for example, keeps no record of the time of her travail. Yet she knows when "her time is up" and prepares a place for her confinement. When her litter reached the point of development at which they become independent of the mother the latter refuses longer to suckle them, even driving them away from her, showing a degree of clairvoyance as well as sagacity which the human mother does not possess. Moreover, animals wash their young and take care to keep themselves free from parasites by bathing and the use of sand and similar substances. Many of them bury their excrement to prevent unwholesome or offensive odors. When sick they refuse to eat, but drink water freely. When suffering from fever they bathe in water, seek outdoor air and avoid the light. If likely to die they seek places of seclusion, where they may be free from annoyance and at rest.

These prehensile and conservative instincts among the mammalia excite less wonder on the normal side than on the abnormal, though the normal are no less wonderful than are the abnormal. Dogs and cats, suffering from disordered stomach, eat certain grasses, which have the effect of purging and vomiting. The dog also eats fat with avidity when constipated and in need of purgation, but abstains from it in his normal conditions. The horse will eat fat for the same purpose; and earth, coal-dust, etc., when suffering from worms. Cattle seek certain herbs when ill—medicinal herbs—such as they would not eat when well. Horses and other animals, when suffering from chronic rheumatism, expose themselves to the sun. Dogs and other animals seek water in which to bathe their wounded limbs. M. Delaunay, a French writer, has recorded many instances of instinctive therapeutics among the lower animals when suffering from fever, infection, wounds, etc. He relates the case of a dog that, on being stung by a viper, held the part in running water for days, until it finally recovered. He instances also the case of a dog that was badly injured by being run over by a carriage, and that remained lying in a brook during three weeks. The animal recovered. A terrier was severely wounded in his right eye. It secluded itself from the light and heat and ate a light, abstemious diet. The wounded eye was treated with spittle applied by itself by means of its paw, which it licked on its upper surface and then applied it to the wound. This it did repeatedly until the wound healed. The cat shows similar sagacity in treating its wounds. M. Delauney relates instances in which this animal, which in its normal state, exhibits dread of water, when wounded, had sought the stream in which to bathe and irrigate the wounded part. The same is true of savages but slightly removed in the scale of being from the animal. The chimpanzee, when wounded, arrests bleeding by compression, and dresses the part with leaves and grasses. Low-bred savages dress their wounds in water, lie in running water, abstain from food, and drink nothing but water when suffering from fever. When infectious fevers. as smallpox, break out in their camp, the camp with all its appurtenances, is burned and its inhabitants removed to fresher and more wholesome quarters. These and other similar psychical phenomena showing unconscious willing to the fulfillment of a

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* Philosophy of the Unconscious, II. p. 27.

conscious end, are put by the physiologist in the category of "consensual impulses," a phrase which should deceive no one, since in whatever phraseology the phenomena may be disguised, their psychical origin and character remain to proclaim to us a most wonderful and awe-inspiring truth, namely, that Mind is the genius of the world, the power that designs, moulds into form and being, and determines the destiny of all things.

FLOATING KIDNEY, WITH PECULIAR MENTAL DISTURBANCES.*

By Carl Weidner, M. D., Louisville, Ky.

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THIS patient, Mrs. B., æt. forty-six years, I want to show you, and call attention to a few points in connection with the several troubles from which she suffers. She has a floating kidney, which in itself is a condition that we do not often encounter. Besides there is a dilatation of either the abdominal aorta, or some of its branches, which can easily be made out. The right kidney, as will be observed, is very distinctly movable. It may be easily found at one examination, then perhaps at the next it cannot be found. Some time ago Dr. Marvin examined this patient, and found that the kidney was very distinctly movable, but not apparently enlarged.

She has had symptoms which point almost typically to floating kidney. One of the symptoms is the passage of a very small quantity of urine at one time, and excessive quantities at another; at intervals of many weeks this would occur, showing that there must have been at one time or other some obstruction; still I have been unable to make out any dilatation of the pelvis of the kidney.

I have known this lady for twelve years, and twelve years ago, when making an examination for another trouble, I made out this aneurismal dilatation; that is, I was able to get an impulse and a distinct aneurismal bruit. The dilatation seems to have increased but slightly in the twelve years. She has complained of this sensation, that she felt a throbbing and fluttering occasionally, sometimes referred higher up about the chest. She has never had any other symptoms which were directly attributable to the dilatation. By placing one hand on her back and the other in front, and making firm pressure, the kidney can be very readily felt. Occasionally she tells me that she feels very great uneasiness in the epigastric region. The sensation is as if something was turning or twisting around. At times she has complained considerably with pain in her back. She has some evidences of marked catarrh of the bowel; her actions are sometimes of such a character as would suggest typical membranous enteritis. She has brought me typical membranous masses passed from the bowels. Some were small, others as wide as one inch, and two or three inches in length. Examination showed them to be fibrous masses.

REMARKS.

Dr. J. W. Irwin: I find here a rather delicate lady. I have not gone into detail as to her history, but she has volunteered to tell me a single phenomenon which she has observed herself, and that is, that she constantly hears some one talking to her in her ears. There is a dilatation of the abdominal aorta, beginning below the stomach and extending down fully two inches below the umbilicus. The transverse diameter of the aorta, as far as I can find on percussion, is about two inches at its greatest width, tapering upwardly to the place of beginning. The murmur in this case is heard at the beginning of the dilatation, showing that it corresponds to the place where the rupture has probably occurred in the coats of the vessel. Can it be that this is a false aneurism? All the coats are involved, and the vessel is distended downward.

In the right hypochondriac region I find an enlargement about the size of my fist, which extends downward and forward toward the median line. I take it to be the kidney. I did not turn the patient over to demonstrate its absence from the normal situation. Taking it all in all, there is no great difficulty in discerning the outlines of the kidney by palpation.

Observation such as I have been able to make, partly in the dark, allows me to corroborate the statements made by Dr. Weidner in introducing the case before us. The case is a remarkable one in some respects; *i. e.*, that a separate aneurismal tumor does not appear in line with the abdominal aorta, and the fact of this enlargement having been in existence for so long, seems still more remarkable. There is very distinct aneurismal murmur heard over the aorta.

I have one case of floating kidney in the city, and in that case I find the kidney most of the time lower down in the right side. At times the patient suffers a great deal of pain in the neighborhood of the tumor, evidently of a colicky nature, and when she moves the tumor backward and upward in the direction of the spine and into the lumbar region she has very copious discharges of light-colored urine, but while she has pain the urine is rather scanty and highly colored, evidently coming only from the other side. At times she becomes feverish; she is the subject of hysteria, and at all times her health is not the best. This case has been under my observation seven or eight years, and there is no mistake as to the nature of the trouble. Besides having a floating kidney, she also suffers from syphilis, contracted ten or twelve years ago. Under some very imperfect treatment which she received she has shown lately evidences of syphilitic growths in the brain. She also has nodes on the clavicle, on the sternum and on the frontal bones, which have become very prominent and firm. Whether this condition has had anything to do with the state of the kidney I do not know, but presume it has not. There is no history of traumatism, and nothing unusual ever occurred at the birth of any of her children to show that she had been subjected to any strain.

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*Read before the Louisville Clinical Society. Stenographically reported for this journal by C. C. Mapes.

Dr. Louis Frank: I examined this patient particularly as to the floating kidney, and find it well down in the abdominal cavity, comparative down almost into the inguinal region. It is quite movable, and somewhat painful on slight pressure. I was unable to make out any dilatation either of the pelvis of the kidney or along what was probably the course of the ureter.

As to the aneurism—I did not auscultate, but there is felt a distinct bruit by palpation, and in this same region can be felt a tumor of some sort which is movable laterally. I believe I would consider the question as to whether the tumor felt in this region, *i. e.*, in the median line over the aorta, did not have something to do with the aneurismal sound, the bruit, which is heard by auscultation and also felt by palpation. I notice also that the woman has some arterial degeneration, as shown by the condition of the eye. There can be no question as to the diagnosis of floating kidney, also of aneurism, although I believe the dilatation is very slight, and possibly the bruit is in a measure due to pressure of the tumor which is felt in this region.

Dr. T. P. Satterwhite: I have only seen one floating kidney, and that was in a patient of mine twelve years ago, which Dr. Ouchterlony saw with me. It was very distinct, the whole outline of the kidney could be felt very readily; it came over toward the median line. The patient had complained for many years with abdominal pains, which were obscure, and not accounted for until the discovery of this tumor, which we had no difficulty in diagnosing as a floating kidney. Nothing was done for the displacement, and the patient is probably living to-day.

Dr. Louis Frank: I want to call attention to the fact that in these cases diagnosis can usually best be made with the patient in the standing posture; this is the best way to make an examination with view of completing a diagnosis. Floating kidneys are not always freely movable; they most often occur upon the right side, and are most common in women. If any great amount of trouble is occasioned by the condition, then I think the patient should be operated upon. Edobohls has shown some remarkable results in the silk worm gut suture in this class of cases.

Dr. John E. Hays (visiting): Cases of movable kidney are not seen very often, and when they do occur they are necessarily interesting. I saw this case some time ago when in charge of Dr. Weidner's practice during his temporary absence; there was then some disturbance about the lungs, and at that time I was able to make out the floating kidney without any difficulty. She also had at that time serious disturbance about the kidneys—the passage of large quantities of light-colored urine.

The question as to whether there should be any operative interference in this case particularly, is one that would necessitate a great deal of care. There are other conditions present, which I presume Dr. Weidner will speak of, that might forbid any operative interference, and even at her age, with no more pronounced disturbance than there is, from the condition of the kidney, I doubt very much whether any operative procedure would be advisable.

Dr. F. C. Leber (visiting): I believe that Dr. Weidner's diagnosis is absolutely correct, so far as the floating kidney is concerned. I am not so sure about the aneurism. The diagnosis of floating kidney is sometimes exceedingly difficult. I diagnosed one twenty years ago, that eventually came very near being operated upon. I made the diagnosis in that case by carefully palpating the lumbar region on both sides, finding a deep depression in the right lumbar region. Nearly all cases of floating kidney occur in females. The deep depression is generally on the right side, rarely on the left. When the kidney is not adherent to any organ, it moves in accordance with the respiratory rhythm; during inspiration the kidney is pushed downward, and during expiration it recedes.

I know of no conservative method of treatment to be relied upon; trusses are absolutely useless, and I think these cases ought to be relegated to the surgeon for operation, for fixation of the kidney in the lumbar region in its proper position. As I have indicated, floating kidney almost invariable occurs in females, and usually on the right side. I have never seen a floating kidney in the male. I have observed in all three cases. There was comparatively little difficulty in making a diagnosis in either case. In this case we can make out the exact shape of the kidney in its abnormal position, and we can also demonstrate its absence in the normal site, by palpation in the lumbar region. I can distinctly feel the left kidney in its proper position, but there is a depression where the right kidney should be.

Dr. Carl Weidner: I showed this case because I regard it as an extremely interesting one, also to get some advice as to another point. There can be no question about the correctness of the diagnosis of floating kidney. I believe all the gentlemen have so stated. Concerning the aneurism, I can feel a distinct dilating impulse; I get a thrill by palpation, and hear a bruit by auscultation. There has been all this time a marked enlargement of one of the vessels, I do not know which one, whether the aorta or whether it is a branch which runs at an acute angle from the aorta, such as the large mesenteric. The hardness that Dr. Frank feels back of this I think is nothing more or less than the vertebral column, as the patient is quite thin. I think this is the reason we feel it so distinctly and so plainly, and it may cause us to think there is an aneurismal dilatation when there is none.

Dr. Irwin made one remark which I simply wish to refer to: He does not think this is a true aneurism. I would like to know why it should be a false one. By a true aneurism we mean a dilatation of a vessel, with rupture of one or two of its coats. A false aneurism is one where all the coats have given away and the blood has become encapsulated. There are no evidences of a false aneurism in this case.

As to operative interference, from the fact that this patient has been under my observation for over eleven years, and there has been no marked increase in the dilatation nor any pronounced symptoms from the floating kidney, I see no reason for operating now.

Dr. Irwin called attention to another feature which I will now give in detail, as the patient has been excused, and that is her mental condition. She has, outside of the two troubles already mentioned, a third factor, which has become more and more pronounced during the past few years. She has had several forms of mental disturbance. She began with a form of hallucination that was referred mainly to objects as well as ideas. At that time, about two years ago, she imagined some one was speaking to her; she imagined that some one was putting something in her hand; or that she saw something running across the floor and about the house; she imagined that she saw something fall, that she heard the noise, etc. But another factor always present was that she heard singing; that the people would sing when she asked them. Within the last three months these mental disturbances have become much more marked, and the main symptoms she complains of are these: During both day and night, except when she is asleep, and she only gets two or three hours' sleep, even under the influence of hypnotics, she hears noises, she hears voices; she hears them distinctly speaking to her, giving her directions what to do and what not to do. Now she refers these voices to some that are known to her, and also others whom she knows nothing about. Those known to her are her husband and daughter. For instance, she will take up the newspaper and begin reading; presently she will say: "Now they are reading for me." She simply looks at the paper and says that her husband or daughter reads to her. These symptoms have been very much aggravated in the last three months; she gets very little rest; she has been getting various hypnotics without any effect to speak of. She has lost some in flesh, but not as much as one would think with the tremendous loss of sleep. Her appetite is moderately fair. She has never exhibited any homicidal or suicidal tendencies, or demonstrations of a violent nature, so far as I know.

I am very thankful to the gentlemen who have discussed the case in regard to her physical ailments, and I would also solicit counsel as to the best method of managing the case as relating to her mental condition, and whether it will be advisable to send her to the asylum.

Dr. Boggess (visiting): In my judgment this is a typical case of delusional insanity. As to treatment and outcome of the case, all I can say is that these cases are very dangerous, not to the patients themselves, but to their families. This old lady will some time in the near future possibly hear voices telling her to kill her husband, or her daughter. These are the cases that result in homicide more frequently than any others. To my mind it is a typical case of delusional insanity, which is gradually growing worse, as Dr. Weidner has stated. Her mania seems to be associated chiefly with her husband and daughter, as she imagines they tell her to do things, etc. They are very dangerous cases, and almost all cases of homicide—killing of a child, husband, mother, daughter, etc.—are these cases of delusional mania. It is a well-known fact, I think, that floating kidney oftentimes produces such nervous disturbances; exactly why this should be so I cannot say. In some cases it has been known to result in insanity, in others melancholia, and some form of mental disturbance quite frequently results. It may be due in this case to some disturbance from the aortic aneurism, but I know the books state that these cases of floating kidney should be operated upon, for the reason that they are likely to produce many nervous symptoms. This may be the cause of the mania in the case presented to-night. The woman is really suffering from delusional insanity, and for the safety of her friends, especially her immediate family, she should be confined. These are the cases in which hypnotics do not have much effect. If not now, in a very short time, this patient will have to be confined in an asylum, as the case will become one of typical melancholia.

Dr. Aug. Schachner: I wish to say just a few words in regard to the floating kidney element of the case. Drs. Nemann and Morris, who have written the best works upon surgical diseases of the kidney, have pointed out in a very emphatic way that we do not usually make the distinction which we should between *floating* and *movable* kidney. There is a distinct anatomical difference between floating kidney and movable kidney. There is a difference in the range of motion, and also in the anatomy of the condition. In movable kidney there is not a mesonephron as there is in floating kidney; the floating kidney has a distinct mesonephron, which gives it a very wide range of motion. It is very necessary to make that differentiation between floating and movable kidney, before you can intelligently apply any measures toward relieving the condition. In this case I think the floating kidney element is one for surgical consideration, yet there are other conditions which are of more importance, and overbalance the element of floating kidney. Operations for floating kidney have been rather unsuccessful. The most satisfactory operation that we have for this condition, which the authorities recognize, is where a lumbar incision is made and the kidney fixed in proper position, either by means of silver wire or silkworm gut. In this fixation everything is stripped from the kidney between the parenchyma, and the kidney is brought up close against the abdominal wall with the right parenchyma of the kidney exposed and anchored there, either by permanent stays in shape of silver wire or silkworm gut; these sutures are introduced deep through the kidney structure and left there, until good fixation has occurred. In doing this operation it is desirable to get as much inflammatory action as possible, in order to make a good, firm, plastic anchorage.

Dr. P. F. Barbour: I shall speak only of the insanity features of the case. I agree with Dr.

Boggess in the diagnosis of her mental condition. The prognosis is very bad in such a case as this. for she has delusions not only of sight, but also of hearing. The involvement of more than one sense adds to the gravity of the case. I did not understand Dr. Weidner to say that this patient had evinced any other symptoms of melancholia, but I have no doubt she will develop them in a short time. I would advise her confinement in an asylum, where safety to all concerned would be secured.

THE MANAGEMENT OF ACCIDENTS OCCURRING DURING THE ADMINISTRATION OF A GENERAL ANÆSTHETIC.

By J. Hubley Schall, M. D., Brooklyn, N. Y.

No department of surgery demands more thorough acquaintance with the necessities and the possible dangers of the situation than anæsthesia. The comparative rarity of accidents is the unquestionable cause of the indifference to this important subject that is everywhere apparent; but the rarity of accident is no excuse for the absence of precaution.

The assistant to whom the responsibility of administering a general anæsthetic is committed, should be familiar with all the signs that may appear, and he should also be perfectly familiar with the various methods of resuscitation in case of accident.

The administration of a general anæsthetic is very often confided to a recent graduate, and frequently to a student scarcely out of his teens—a youth without experience, and without the slightest comprehension of the responsibility he has assumed. The person charged with the responsibility of giving an anæsthetic should concientiously study the patient's pulse and respiration during the entire period of narcosis, and should be able to properly and immediately meet any complication that may arise, as success depends on the celerity with which everything is done. Many a life, no doubt, might have been saved, which was lost in consequence of delay on the part of the anæsthetist, who knew not what to do at the time of danger. Again and again, I have seen youths administering an anæsthetic, who, instead of devoting their entire attention to the respiration and circulation of the patient, may be seen craning over the body of his semi-asphyxiated victim, striving with childish curiosity to follow the details of a perineal operation. Such misplaced attention is entirely wrong, and an injustice to the patient. With a thoroughly trained anæsthetist a fatal accident is an exceptional occurrence.

The limited knowledge displayed by many practitioners in the treatment of accidents occurring during the anæsthetic state would be amusing if the results were not so sad and serious in the end. The idea entertained by a large number of men is that any complication arising during narcosis can be met with a few injections of whiskey or ammonia. Further means of resuscitation, as I have very frequently noticed, end here.

Position of the patient has been assigned as a cause of death in certain instances. Perrin records nineteen cases in which the anæsthetic was administered in the sitting posture with fatal results.

Under no circumstances would I ever be tempted to give an anæsthetic to a patient other than in the recumbent position, as the dangers of sudden syncope are infinitely greater.

We should keep in mind that the period of great danger is mainly in the early stages.

In the primary stage the feeling of apprehension may in a measure be avoided by a few encouraging words, and engaging the patient to inspire deeply, for the purpose of shortening the stage of excitement.

The mode of inhalation is known to constitute a cause capable of producing fatal results. A too hasty administration of the vapor produces a rapid saturation of the tissues and consequent death. It should always be kept in mind that the primary stage of anæsthesia is one of excitement. A sudden, full inhalation may act as shock, and produce disastrous results, Never be in a hurry in giving an anæsthetic, and much time and difficulty will be saved. Rapidity in producing complete narcosis is by giving a continuous concentrated vapor.

The opinion prevails, more or less generally, that narcosis is complete when the conjunctiva becomes insensitive; this is an error. If the anterior surface of the trunk is insensible to touch, then anæsthesia is complete, as insensibility persists longer in this neighborhood.

In a general way the treatment of a patient in collapse under anæsthesia is simple, and, as a rule they respond nicely to the proper resuscitant.

The excessive coughing produced by the respiratory irritation may be overcome by giving a less concentrated vapor until the irritation disappears.

Patients, as they approach the second stage, sometimes offer a violent resistance. Under such circumstances it is not uncommon to see a half dozen assistants throwing themselves upon the struggling form of their victim, while one pours upon his face a shower of the anæsthetic. Such a course is imprudent, to say the least, nor is it necessary. With patience and perseverance, employing a little more time than usual, the most violent individual can be subdued. In my experience it is just this class of cases in which the transition from excitement to sudden collapse takes place.

In the second stage of anæsthesia the patient may cease to breathe; this is known as "respiratory forgetfulness," and can be corrected by a dash of ether on the epigastrium or sudden pressure on the chest.

Before complete anæsthesia is produced there may be a respiratory spasm. The main symptoms of this conditions are, fixation of the lower jaw, cessation of breathing, cyanotic countenance, and if there be hemorrhage from a wound, there appears a dark venous flow from it. The cause of this spasm is probably due to irritation from the inhaled vapor of the laryngeal and pharyngeal nerves, resulting reflexly in a contraction of the pharyngeal, laryngeal and maxillary muscles. The question now is, How can respiratory spasm be overcome? The method I have used to best advantage is one suggested by Dr. Northrop, of Philadelphia, and that is forcing forward the lower jaw. Failing in this, grasp the tongue with Volsellum forceps and make rhythmical traction; after a proper trial the anæsthetist is usually relieved by seeing the patient gasp, the lividity disappear, and the respiratory function resumed.

Every sudden modification of the rate or volume of the pulse should be guarded. It is well-known that during complete narcosis there is a diminution of the number of beats; but this diminution is gradual. A small, hard pulse need not cause suspension of the inhalation. The admission of more air will be sufficient; but it should be remembered that if the pulse becomes intermittent and thready, the danger of syncope is immediate; then stop the anæsthetic, lower the head of the patient, elevate the extremities and rub the surface of the body in a manner favorable to the propulsion of the blood through the capillary network of the skin.

When complete anæsthesia has been reached it can be maintained by the continuous administration of small quantities of the anæsthetic given by the "drop by drop" method.

Mucus in the pharynx or larynx may seriously embarrass the breathing. It can be removed by lowering the head and turning the face to one side, thus allowing it to flow into the mouth, when it can readily be removed by a sponge or wad of cotton attached to a pair of artery clips.

Vomiting during the anæsthetic state is annoying, and at times serious, owing to the vomited matter getting into the respiratory passages and obstructing them. As soon as any signs appear, force the anæsthetic and keep up the lower jaw. If vomiting follows, lower the head and shoulders, turn the patient over on the side, and wipe all vomited matter from the mouth. If cyanosis appears, rapidly invert the patient, draw out the tongue, swab out the mouth and pharynx, and, if resuscitation is not immediately secured, perform tracheotomy, as low down as possible, followed by artificial respiration after Sylvester method.

The tongue may fall back and close the glottis, the patient becomes blue, pulse irregular, with embarrassed respirations. Under these circumstances extend the head, throw the lower jaw forward; this acts on the hyoid bone, elevates the epiglottis and opens the glottis, admitting a free ingress of air.

At times the breathing may become superficial, or cease entirely, without being obstructed. Remove the inhaler, allow fresh air, and dash a little ether on the epigastrium. The shock thus produced will often stimulate the respiratory act. Should the pulse become weak and intermitent, forcibly knead the area over the præcordium, failing in this, dilate the anal sphincters. The breathing still continuing to be shallow and intermittent, artificial respiration should be performed until morally certain life is extinct, or the respiratory function has been resumed.

Sudden collapse due to cardiac failure calls for bold stimulation. Stop the anæsthetic; a hypodermic injection of ether, or dilute aromatic spirits of ammonia, will very often suffice to bring back tone to the pulse. Should there be no response, rectal injections of valerinate of ammonia and whiskey, of each an ounce, will sometimes be of value. A mixture of digitalis and strophanthus, in some cases acts rapidly.

One of the most efficient heart stimulants I have ever used in sudden collapse is the "Collapsic Mixture." It is composed of the following ingredients: Benzoic acid, 1.5 grms.; camphor, 1 grm.; rectified spirits, 12 grms. One drachm given hypodermically may be used, and frequently repeated if necessary.

Subcutaneous injections of nitro-glycerine and brandy, 1-100 gr. of the former to a drachm of the latter, has proven of great value in my hands; as a last resort it may be injected directly into the femoral vein.

Faradization of the phrenic nerves must not be forgotten. One electrode should be placed in contact with the wall of the thorax, over the sixth intercostal space, on the right side of the body, while the other electrode should be placed over the right phrenic nerve, just outside of the carotid artery in the neck. Its use should be combined with the attempt to fill the lungs by artificial respiration. The current should never be energetic.

Failure of the circulation, due to hemorrhage, needs the most heroic treatment. If there has been a great loss of blood, our first object should be to diminish the size of the circulatory system, and thus attempt to fill the important vital centers. This is best accomplished by bandaging the extremities from the periphery towards the trunk. Elevate the limbs and apply dry heat to the body. Stimulate the heart with nitro-glycerine and brandy or the "Collapsic Mixture," then perform transfusion, using a saline solution, prepared by adding to each pint of recently boiled water, one drachm of clean table salt. It should be injected at a temperature of 100° F., at the rate of a pint in fifteen minutes. The quantity injected should, nearly as possible, equal the quantity of blood lost. The pulse should be carefully watched during the procedure. Bold stimulation should be resorted to, soon as the patient is conscious enough to swallow..

In regard to chloroform narcosis: As is well known, anæsthetic vapors are very irritating to the superficial nerves of mucous membranes of the respiratory tract. On this account reflex accidents are liable to occur, most likely to affect the heart, especially in the early stage. Rosenberg, a German surgeon, overcomes that danger by first spraying the nasal passages with a 10 per cent. solution of cocaine, repeating the spraying every thirty minutes if the anæsthesia is prolonged.

Chloroform should always be administered by the "drop by drop" method. The cocaine is antitoxic to the chloroform. By careful administration of the anæsthetic, the probability of an accident will be greatly reduced. In case an accident should occur, forcible dilatation of the rectum, regular traction upon the tongue, and stimulating the heart by rapid, forcible pressure of the hand over the region of the heart, offer almost a positive promise of resuscitation.

Let it be remembered that a hypodermic syringe and an ounce of brandy is of little value in treating all cases of collapse under an anæsthetic, and let me emphasize the great importance of keeping up and well forward the lower jaw during the entire period of anæsthesia.

The value of amyl nitrite should never be forgotten in cases of impending death from any anæsthetic, especially chloroform. If respiration ceases, it can no longer reach the blood through the luhgs, and it should be hypodermically injected. Great caution should be taken in its use under such circumstances, for the remedy itself is a depressing poison, and the addition of its effects to those of chloroform may easily become doubly disastrous ; but in cases where the patient is not actually dead, where respiration continues, and an extreme pallor and failure of the pulse indicates danger, the cautious exhibition of this remedy may prove advantageous. When the condition, during chloroform poisoning, is, therefore, such that artificial respiration and reflex-excitants are powerless to resuscitate the patient, amyl nitrite will prove to be a useless remedy. It will act as a positive source of danger. But when the dangers present are dependent upon a feeble circulation, judicious administration of the amylic vapor will prove useful.

Troublesome vomiting following anæsthesia very often can be controlled by placing a napkin saturated with vinegar over the patient's face, care being taken to allow all air inhaled to pass through the linen cloth. This cloth must be kept on as long as possible (for four hours at least). If the cloth is removed too soon, nausea will follow.

EXTERNAL AND INTERNAL USE OF OX BLOOD.

By JAMES ROBIE WOOD, M D., NEW YORK.

A BRUSQUE and belligerent semi-medical paper reaches me semi-occasionally. Utterly careless of its circulation it prefers the whipping-post to the molasses cask for persuading the world, and others, to adopt its espoused ideas.

For many months its vigorous, dogmatic and stubbornly honest editor, who is a medical man by brevet, has continued to publish accounts from physicians of the surprising efficacy of ox blood, in the form of "bovinine," in various diseased conditions. Especially as a soothing and curative application for painful varicose and other ulcers, tubercular ulcerations, gangrene, abscesses, burns, erysipelas, cancer, carbuncles, chancroids, pyæmia, painful crushed and lacerated wounds, etc. As an internal remedy in tubercular diseases of the lungs, anæmia, etc.; also in large rectal injections for cases of collapse.

Considering the statements mere assertions of enthusiasts, or, possibly, ingenious advertising matter, I paid very little attention to them, until several cases of painful ulcerations induced me to try the suggestions. Proving decidedly comforting in a few patients, I used it for a case of lupus of many years' duration. The patient, finding it a more efficacious and pleasant application than any other she had ever used, continued to apply it for some weeks. As it had controlled the disagreeable discharge better than any other remedy, she discontinued all other external treatment. The ulceration, which had been destroying the lower eyelid, was arrested, and there was evidence of repair. Had the surface been curetted before applying the bovinine, the result might have been still better. Having undergone curetting several times, years before she was not disposed to try it again. I now changed the bovinine for another beef extract, which had been prepared with heat, but after a week the patient objected, as the discharges became troublesome again. Later I shall try the Valentine's meat extract, as that is prepared without heat. Meanwhile the patient continues to improve on the bovinine, which she objects to changing again. It has also proved a soothing application in one case of erysipelas. Looking back many years, I recall the cruel use of live fowl and small animals, by suddenly cutting them open while alive and binding the bloody surface to ulcers, mad dog and snake bites. Thinking such barbarous practice vulgar superstition, I never took the pains to find out if any one was ever benefited by such means.

It may be well to add a few condensed extracts from the *Sanitary Era*, the uncompromising semi-medical journal of which mention has already been made:

"Lumberman's foot cut with an axe. Dirt and neglect for sixteen days made a serious case of the wound. Injured bones necrosed and loose, suppuration profuse. Dead bone removed, cavity curretted and washed with bi-chloride solution and packed with iodoform gauze. After three days the beef blood dressing was begun, and unusually rapid repair resulted.

"Two cases of blood poisoning from injury of finger and hand. Arms swollen and honey-combed with sloughing ulcers. Hands and arms dressed six times a day with bovinine, the cavities packed with the same on absorbent cotton. Great and immediate relief, and a perfect repair by twelfth day.

"In a case of extensive gangrene with fever and delirium, bovinine dressing rapidly relieved all suffering, and repair promptly followed.

"A serious case of erysipelas, with fever and delirium, was treated by spreading soft cloths saturated with bovinine over the face and scalp, and changing every hour. The patient convalesced in three days.

"A large chancroid speedily healed under frequent bovinine dessings.

"Numerous varicose and other ulcers were quickly cured. Some were curetted before applying bovinine.

"In cases of collapse from several causes, large rectal injections (six ounces of bovinine to two of milk) were used with great benefit.

"From a man of seventy-two, on account of a neglected carbuncle, the flesh had already sloughed off back of neck and tips of both shoulder blades. The repair said to be marvelous under the use of bovinine.

"Several cases of advanced pulmonary and laryngeal phthisis—where patients had lost from thirty to fifty pounds. Swallowing even soft food intensely painful, on account of ulcer of epiglottis.

"Treatment for three days was two teaspoonfuls of bovinine in cream every two hours. Then a tablespoonful every two hours, with beechwood creosote every four hours, for two weeks. By this time the night sweats had gone, patient slept better, cough and expectoration less, and had gained in appetite and flesh. The bovinine was now increased to a wineglassful in a glass of cream every three hours, creosote continued. Within five weeks from beginning of treatment the patient had improved in every way, and the gain was sixteen and a half pounds. At the same time the ulcerated epiglottis had improved under the use of two parts of bovinine with one of salt water, sprayed in throat three times a day.

"Dr. T. J. Biggs, who has been the most earnest advocate of the bovinine treatment, says he has treated six similar ulcerations of the throat with the blood and salt water sprays, with complete success.

"In skin grafting, it is asserted that the results have been perfect. One case which had been unsuccessfully treated by other methods, repaired satisfactorily under the bovinine dressing. The sore was on right side of face and nose—3 inches long by 1½ inches in diameter, and covered with unhealthy granulations. After cleaning and then cauterizing with a 25 per cent. ethereal solution of pyrozone, and dressed for three days with Thiersch's solution until healthy granulations were established, ten minute points of skin were distributed over the surface. These were protected by strips of sterilized rubber tissue, which does not adhere to the grafts so as to displace them when dressings are removed. The dressing was gauze soaked in salt water (one drachm to the pint of water). Over this more rubber tissue, cotton and a bandage. On the third day every graft was found feebly adherent and the wound healthy. After cleansing with Thiersch's solution, fresh rubber tissue was applied and dressed with gauze soaked in bovinine, and covered with oiled muslin, cotton and bandage. Two days after every graft was firmly adherent and wound healthy. Bovinine dressing was repeated in same manner every day for a week, when grafts were found doubled in diameter and wound healthy. Thenceforward sterilized gauze, soaked in bovinine, and nothing else, was applied directly and daily to the surface for seventeen days, making thirty-one days from beginning of treatment. The whole tract was then found perfectly healed and covered with a new delicate skin. Dressing now discontinued, and the patient told to wash the part four or five times a day with sterilized water. Three days after was fully discharged.

"In many cases the bovinine seems to remove and prevent pain."

The registered formula of bovinine is as follows:

Defibrinated bullock's blood......	65.00
Dessiccated egg albumen........	10.00
Old Bourbon whiskey.	19.00
Chemically pure glycerine........	5.00

Dr. Pratt, of Chicago, has for some time used bovinine for a vaginal and uterine douche. He also applies it as a preparation for operation.

If, as stated by Dr. Biggs and many others, this preparation has such results, it may be worth while to try it further. But as medical men have been unfortunately too often called upon to trust the words of visionaries it may be difficult to try it fairly until some master mind's sanction compels us to follow, *lock step*, in the procession.

GERANIUM MACULATUM IN HÆMOPTYSIS.

By C. J. Wendt, M.D., New York.

Of the House Staff, Metropolitan Hospital, New York.

THIS drug has lately received some attention from the profession in the treatment of hæmoptysis, and clinical experience with it in the phthisis wards of the Metropolitan Hospital has shown it to be a drug of great value in the treatment of this symptom.

In order to check this constant drain on the system we must employ some drug possessing decided astringent qualities.

Experience has demonstrated conclusively that to accomplish this result we must use one of the vegetable astringents, as minerals have little or no power over the condition.

Most vegetable astringents owe their power to the fact that they possess tannic or gallic acid.

Tannic acid, possessing the power of coagulating albumen, can obviously not be used with advantage except it be applied locally to the bleeding spot, such as the alimentary track, or the surface, where it is of decided value.

Chemical analysis of the blood, after the adminstration of tannic acid, has developed the fact that the tannin does not appear in the circulation as tannic acid, but has been changed over to gallic acid before being absorbed.

Gallic acid, possessing as it does, astringent qualities, is by no means so powerful as tannin; but at the same time it has no power to coagulate albumen, hence may appear in the circulation without danger.

Geranium maculatum has been found to contain about 30 per cent. of the gallic and tannic acids, and among other things, gum, resins, sugar, starch and albumen.

That its action on the mouths of bleeding vessels depends entirely upon these two acids is not certain, as the administration of either acid, alone or combined with the other, will not yield the same result.

It has been customary to prescribe this drug in from 2 to 5 drop doses of the tincture, repeated every two hours, upon the first signs of blood in the spectrum, and the results have been uniformly good.

A few doses generally suffice to stop the flow, and only in cases of long standing has it been found necessary to continue the treatment over any length of time.

In such cases the influence of the drug manifests itself by a change in the character of the expectorated blood, becoming darker, clotted and much less in quantity.

In one case of phthisis pulmonalis, admitted with a history of continuous expectoration of blood for four days, and within twelve hours previous to entrance had lost a cupful of bright red blood, was treated with this remedy, and although within twelve hours a second hemorrhage occurred, during which three ounces of blood was lost, no further trouble was experienced for at least ten days, when a few streaks were noticed, and promptly caused to disappear by a few doses.

As many as fifty cases have been so treated in the last two months, and in only one case has it failed to control the flow, this being a case of four months' standing, and under the action of the remedy is slowly improving.

Not only in phthisis is this of value, as the same result has been obtained in cases of bronchitis and passive congestion.

Hypodermatically, geranium maculatum has not been used as far as known. Experiments on animals are now being conducted, in order to determine whether or not its direct introduction into the circulation is attended with danger.

DISEASES SIMULATING TUBERCULOUS COXITIS.*

By PROF. S. DUPLAY, PARIS, FRANCE.

I AM about to study with you a group of diseases which are not considered collectively as I should like to see it done, and they are those very different affections which simulate true tuberculous inflammation of the hip joint, while in reality there is not the slightest tuberculous lesion.

We may take as a point of departure a state which we shall find on examination of a woman aged forty-three years and a housewife, who lies in the second bed of the Nôtre Dame ward, and who but recently entered the hospital. I shall not say anything with regard to her antecedents, for they present nothing of particular note. The commencement of the affection dates back to the fifteenth of last July, when she noticed very vague pains in her right hip. She then began to limp, and the pain would completely disappear on lying down. Matters went on thus for two or three months, when she was in about the same condition that you see her to-day; it gradually became impossible for her to walk, though her pains were not very severe. The physician who treated her diagnosed coxitis, and as no amelioration followed his treatment he sent her to the hospital.

If we examine this woman in the dorsal position, with her two limbs parallel with each other, we notice neither abduction, flexion of the thigh upon the pelvis, but only rotation outwards. She is able to flex her thigh slightly upon her pelvis, and to increase the external rotation, but rotation inwards is impossible. Beyond this all the movements are more or less suppressed, and they give rise to severe pain on attempting them. The spontaneous pains are either absent, or but slight, yet there are points which are painful to pressure, of which two are fixed, one at the great trochanter, and the other externally, at the side of the obturator foramen.

The inguino-crural region is the seat of a tumor, of which the patient was entirely ignorant, and with regard to which she consequently cannot furnish us any information. This tumor is absolutely indolent, and is of the size of a large hen's egg. Above, it extends as far as Poupart's ligament without reaching beyond it, and below it reaches three or four fingers' breadth below this ligament. It is not sub-cutaneous, but sub-aponeurotic, and another thing that shows that it is deeply situated is that it pushes up the femoral artery, which is felt to pulsate superficially at its internal portion. Between the skin and the tumor there is a thick layer of fat, and besides a few glands are felt, which are seen to be slightly enlarged. I will add that this tumor is completely irreducible, wholly unmodified by straining or cough on the part of the patient, and that it presents obscure though undoubted fluctuation. Finally, I might remark that this patient is very emaciated, and her general health is not at all satisfactory, though nothing is to be discovered in her internal organs which would account for this. One might at once diagnose a tuberculous coxitis. Nevertheless we do not find in her case the painful points which are noticed in a case of coxitis of a tuberculous origin nor the flexion of the thigh upon the pelvis, the pain in the knee which is so characteristic of this affection, nor abduction of the limb. Besides, to clear up the matter, we have anæsthetized her, and we have noticed that beyond the external rotation, all other movements are possible, and even the rotation outwards is possible, though, not to an extreme degree. Therefore, we can affirm that there is absolute or nearly absolute integrity of the coxo-femoral articulation.

In short, we have an inguinal tumor which is accompanied with a complex of symptoms which greatly resembles a coxitis. Let us by rapid examination try to make out the contents of this tumor. It may be first of all stated that it is liquid, on account of fluctuation and a trial puncture, of which I shall speak later. The tumor does not pulsate, and consequently has nothing in common with aneurism of this region; it communicates in no manner with the abdominal cavity, which would eliminate both a burrowing psoas abscess and hernia. Possibly, you might say, it is either a cold abscess, a suppurating grandular tumor, or an abscess dependent upon disease of the bone. The supposition of an abscess of glandular origin appears improbable, as the tumor originates so deeply. Is it an abscess arising from the pelvic bones? I do not think so, as there is no spot sensitive to pressure there. There is, it must be admitted, a painful spot on the great trochanter, but I cannot find the least relation between it and the growth. I had thought at one time that it might be an abscess originating in a limited lesion of the neck of the femur, but I have rejected this view, on account of the complete absence of all lardaceous infiltration which surrounds abscesses of this nature. Hence, we can only have a serous cyst, which is either hernial, a glandular cyst, a hygroma of the psoas bursa or a hydatid cyst. A hernial cyst would require other commemorative signs which are absolutely lacking. As to glandular cysts, they are situated lower down, and they develop more slowly, whence the patient usually knows of the existence of the growth; besides these cysts with the nodular form and their superficial situation are quite different from the lesion whose nature we are trying to determine.

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* A clinical lecture delivered at the Hôtel-Dieu, Paris, France. Translated from *La Semaine Medicale*, No. 63, 1895, by F. H. Pritchard, M. D., Weaver's Corners, O.

On account of the deep situation of the tumor and its diffuse form it can only be either a hygroma of the bursa of the psoas muscle or a hydatid cyst. I should be inclined to admit the possible presence of a hygróma of the bursa, which would correspond to this series of symptoms, if it were not for the absence of one characteristic sign, flexion of the thigh on the pelvis, which is completely lacking in this patient. As to a hydatid cyst, I had thought of that from the beginning, recollecting to have seen twenty years ago a woman of middle age who was admitted to the St. Antoine Hospital as affected with coxitis. In reality she was suffering from a spontaneous fracture of the neck of the femur, due to the development of a hydatid cyst, which I watched develop, and which necessitated a final disarticulation of the femur.

In order to gain certainty on this point we have made an aspiratory puncture, which gave issue to a serous liquid, tinged with blood, which M. Berdal has examined in vain for hooklets, which are sometimes observed even in hydatid cysts. M. Savoire has noticed the decidedly albuminous character of this liquid, which corresponds to the contents of these cysts when the hydatids are dead, but enough research has not been made to determine its exact nature. An operation only will clear up this doubt.

I had announced early in the lecture that I had intended to discuss the forms of pseudo-coxitis, and indeed you will frequently meet with a number of conditions where coxitis will be possibly thought to be present when the hip-joint is entirely healthy; this has happened to eminent surgeons. It is important that you be acquainted with these conditions. We shall divide them into two classes. The first comprises those where, as in our patient, the hip-joint is healthy, but where there is an appreciable lesion, more or less in the vicinity of the articulation. The second includes a form of psuedo-coxitis, still more interesting, in which not only is the joint intact, but there is no lesion in the more or less immediate neighborhood of the joint.

The members of the first group are by no means congruous. Most frequently they are inflammatory lesions of the bones, either those of the pelvis or of the upper portion of the femur, notably of the great trochanter. I well recall a young man where a very experienced clinician had diagnosticated a tuberculous coxitis, but where there was only an osteitis of the great trochanter; I operated on him, and he was restored to health. I also remember a child from Melbourne, Australia (the country of hydatid cysts), where all the physicians consulted had diagnosticated a tuberculous coxitis, contrary to the opinion of one of my old students, M. Crivelli, who thought the condition a simple epiphysiary osteitis of the upper end of the femur. I examined the patient, and confirmed his opinion of pseudo-coxitis. The child recovered without the least limping in its gait. What adds the more to the interest of this case is the fact that one or two years later, the child having suffered a fall while journeying through Europe, and, being at Lille, was shown to the best surgeons there, all of which made, without hesitation, the diagnosis of tuberculous coxitis, and desired to begin the usual treatment of that disease. The child recovered completely a few months later, and remained so; I was able to confirm the absolute integrity of the joint.

In other cases there will be a lesion of the serous bursæ in the neighborhood of the articulation. Thus in two cases I have seen direct infection and suppuration of the bursa of the glutæus maximus, which presented an exact clinical appearance of coxitis. These cases are not extremely rare, and I have called attention to them in a lecture on the periarthritic affections of the hip. I have also inspired one thesis, where one will find a number of cases of suppuration of the glutæus maximus offering the clinical picture of true tuberculous coxitis. The same might hold good for inflammation of the serous bursa of the psoas muscle, and possibly our patient presents an example.

Finally, let me recall to you that neoplasms, either when situated in the pelvis or the upper end of the femur, may give rise to a set of symptoms that resemble coxitis. These periarthritic states bring about reflex contraction, especially of the muscles attached to the pelvis and trochanters, whence originate the vicious attitudes of the limb that simulate coxitis.

How will you diagnose these affections? Most frequently you will be struck by the absence of this or that symptom or sign which is present in coxitis; thus, for example, you find in our patient, neither abduction, flexion of the thigh upon the pelvis, nor the saddle-backed appearance of the lumbar region; or you will notice contradictory symptoms or signs not usually associated with coxitis, and it is, indeed, the attentive study of the minor details, which a careful examination of your patient will reveal, and permit you thus to avoid an error of diagnosis.

Then there is also the second class of cases, of which I made mention, and where certain signs are of the greatest importance in making a diagnosis. If you have any doubt, anæsthetize your patient, and, with the muscular relaxation thus obtained, you will be able to move the joint in all directions if it be intact. I shall state nothing with regard to the prognosis of these varieties of pseudo-coxitis, for that will depend on the disease simulating them. Treat this affection, and the dependent symptoms will disappear.

In the second class of cases, though they resemble a coxitis, you will be able to find no material lesion, either in the articulation itself or its neighborhood.

To Brodie especially is due the credit of having called our attention, in 1837, to this class of cases, which disease he described under the name spasmodic coxitis or articular neuralgia; these terms have been generally replaced by that of hysteric coxitis. Verneuil and Charcot have studied this subject very completely.

You will meet with this affection chiefly in women, though a few cases have been described in men. It may be noticed at all ages, yet it is most frequently observed in youth, and especially at puberty. Most often the disease sets in suddenly, from an insignificant cause, and perhaps in a female who has nervous antecedents and even presents all the characteristics of confirmed hysteria. In certain cases it begins from a slight trauma or an inconsiderable sprain, and in some cases it may be imitated, and possibly you will come across in the literature the case of Sir James Paget, where a young girl was affected with hysteric coxitis from being together with her brother, who was suffering from a true tuberculous coxitis. The principal symptoms of hysteric coxitis are: The pain, the muscular contractures and the consequent vicious position of the limb.

The pains are sometimes similar to those observed in true tuberculous coxitis. The patient may experience spontaneous pain in the hip as well as simultaneously in the knee, as in tuberculous coxitis; but, in the meantime, you will notice that the pains have no fixed seat, and that the patient will now complain of them anteriorly and then posteriorly. Very frequently one will notice hyperæsthesia of the skin, which may bring about a nervous attack from mere stroking of the skin. The painfulness to pressure also exhibits certain pecularities. In tuberculous coxitis the pain is more deep rather than superficial, and the reverse is true in the hysteric form, where, as Brodie has pointed out, a pinch of the skin may give rise to greater pain than deep pressure. In both varieties the contractures give rise to the same vicious attitudes of the body, and there is the inclination of the pelvis, as well as the lumbar lordosis. It is indeed true that in the tuberculous form one will notice most frequently flexion, abduction and external rotation, while with the hysteric variety one will meet with flexion, abduction and rotation inward. Yet this would not constitute a differential diagnostic symptom, for both positions may be present in both diseases. In the hysteric variety the resistance of the contractures is remarkable, while in the tuberculous form you will, by a certain amount of time and patience, succeed in overcoming slightly the resistance and moving the joint somewhat. This never is possible in the hysteric form. In this latter disease the gait presents certain characteristics. If one have the patient lifted out of bed she will of course retain the contracture of her thigh, but will suffer no pain, and walking will be possible by hopping, and by bracing herself upon the furniture. Try to do the same in tuberculous coxitis, and at the slightest movement the patient will experience sharp pain, and refuse to get out of bed. This is, therefore, a very important sign, and one upon which one cannot emphasize enough. Except in rare cases, by these means you will be able to diagnose the hysteric variety, by carefully examining your patient. You will recollect the manner of the beginning of the disease, generally sudden; the attitude, which places the lower limb in flexion, abduction and internal rotation; the variability of the seat of the pains, which are besides superficial, while in true tuberculous coxitis they are deep and fixed, and perceptible at parts of the joint which are especially accessible to exploration; *i. e.*, anteriorly, immediately external to the pulsations of the femoral artery, the posteriorly, behind the great trochanter, and finally in the articulation itself, by pushing the head of the bone into the cotyloid cavity, either by striking the great trochanter or by pressing upon the knee. I will add that in hysteric coxitis, even if it has persisted for a long time, you will rarely observe that degree of muscular atrophy which is one of the most important signs of tuberculous arthritis. The general symptoms, and above all the fever, will be lacking, which is often observed in tuberculous coxitis. But, if in spite of all these distinguishing symptoms you are still in doubt, then anæsthetize your patient and see if the articulation itself is intact. The method of the reappearanee of the pain after return to consciousness, is characteristic. As Charcot has shown in the tuberculous variety, the muscular sensitiveness will first be apparent, while in the hysteric form the skin will become sensitive before the deeper parts.

As to prognosis in hysteric coxitis, the outlook, with very rare exceptions, is good, for it is a benign affection, and sometimes a restoration to health may suddenly be noticed. In other cases a cure is only obtained after months or even years. Do not forget that this is a disease subject to recurrence, where, under the influence of an emotion, the same condition may reappear as before recovery. In other cases, from aggravation of the contracture and relaxation of the ligaments, a spontaneous dislocation may occur without the slightest particle of fungous granulations in the joint. But do such patients as these latter really have hysteria?

From the observation of two such patients I am inclined to regard them as dependent upon spinal affections.

What is the treatment of hysteric coxitis? All methods of treatment, from the most active to the most empiric, have been tried, and, indeed, sudden recoveries have been seen after all treatment has been given up. Hence Charcot has set forth this doctrine: The disease is to be left to itself as to surgical measures, and treatment limited to the bromides, sedatives, and especially measures which appeal to the imagination of the patient. Thus one may apply a magnet locally, pass a simple seton under the skin, or, finally, employ suggestion.

In a general way I hold to the view of Charcot, and I think that all violent measures are to be excluded, as energetic revulsives, continued extension and apparatuses, yet, where the vicious position of the thigh is such that secondary joint alterations are liable to set in one might risk crippling the patient, though the coxitis later be cured. I can cite you a typical example of a young girl, where the position of the thigh was such that her genital organs could not be kept clean. In this case I could not hold to Charcot's view, but insisted upon the necessity of anæsthetizing and overcoming the contracture. It was well that I did so, for, in attempting to overcome the contractures, I had to use considerable force, and I felt the tissues give way as in an old luxation. Without the correction of this deformity, this young girl, who a few months later suddenly was completely restored to full function of the joint, would have remained crippled, though her disease was cured. Hence, at the beginning, where the deformity is slight, such treatment is not required; but later it should be corrected, and the limb put into a splint for a time, but not for too long a time, for it would be better to allow the contracture to reoccur and to have recourse to chloroform again, than to treat a hysteric coxitis by prolonged immobilization.

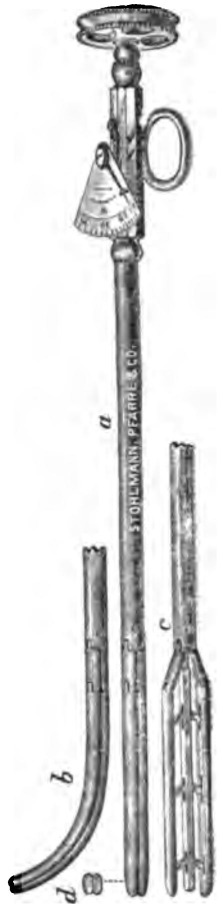
Nephritis of Pregnancy.—Gossmann (*Med. Woch.*, No. 26, 1895), does not find that this disease necessarily ends in chronic nephritis. He saw it recur in one patient during eight pregnancies, but she was still free from kidney symptoms when not pregnant. He finds that induction of labor by means of vaginal douches is perfectly simple, and in two cases this means alone proved sufficient. In one of them the child was saved and reared.

Quantitative Estimation of Sugar in Urine.—M. Cregny describes a simple method for determining approximately the quantity of sugar in diabetic urine, which he suggests would be a convenience to practitioners residing in remote districts, where the necessary chemical appliances for analysis are not always available. The following is the *modus operandi*, which is a simplification of M. Duhomme's process: 2 c. c. each of soda solution, sp. gr. 1.330, and Fehling's solution are poured into a burette and the urine to be examined is added drop by drop, care being taken to heat the solution after each additional drop, and to stop the moment that the blue coloration has disappeared. The amount of sugar present is calculated according to a prepared chart, by the number of drops required to produce reduction of the reagent. The tabulation is as follows: Four drops of urine, reducing 2 c. c. of Fehling's solution, represents 50 grammes of sugar per liter; 8 drops of urine, reducing 2 c. c. of Fehling's solution, represents 25 grammes of sugar per litre; 10 drops of urine, reducing 2 c. c. of Fehling's solution, represents 20 grammes of sugar per litre, etc.

NEW INSTRUMENTS—"URETHRAL DILATORS."

By Bukk G. Carleton, M.D.
Genito-Urinary Surgeon to the Metropolitan Hospital, Blackwell's Island, New York City.

In the cut *a* represents the *straight* instrument closed. It is adapted to the treatment of strictured conditions of the pendulous portion of the urethra when gradual dilatation is indicated; *b* is the curved instrument for the bulbous and membranous portions of the urethra; *c* the open instrument, which is easily and evenly dilated by the turning of the handle of the instrument. The degree of dilation in milimetres or fraction of a milimetre from twenty to thirty-five is accurately indicated on the dial; *d* represents a cross section of the closed instrument. It is oval in contour, with its greatest diameter transverse, so as to correspond with the conformation of the normal urethra, which is a collapsed canal, whose roof and floor are in opposition. The edges are rounded, so, when properly used, there is no more danger of injury to, or rupture of the urethral wall, than there is in the introduction of the selected urethral sound. The inner edges are also rounded, to prevent the entanglement of the urethral mucous membrane in closing the instrument previous to removal.



The instrument has been very successfully used for some time past in the practice of the inventor, and its advantages are manifold.

First: Only one instrument is required to give any degree of dilatation, the exact amount being indicated by the dial. The dilatation is more gradual than is possible with any sound, fractions of millimetres being added as necessitated by conditions present.

Second: As only one instrument is used during the entire treatment, there is less danger of the introduction of germs, etc., into the urethra.

Third: Its construction allows of its introduction into urethral canals, where pathological symptoms and the Otis urethrometer have demonstrated a strictured condition to be present, accompanied by a narrowed meatus, making possible the dilatation and restoration of the urethra to its normal condition without a meatotomy, where incision has frequently been made very large to admit of proper dilatation by the ordinary sounds in the treatment of this class of strictures.

Fourth: It is easily cleaned and made aseptic.

Fifth: It can be adapted so as to take the place of a large number and varieties of urethral sounds.

Sixth: Its strength and construction permits of its use as a divulsor.

The same care should of course govern its use as is indicated in dilatation of the urethra by the various urethral sounds.

Adenoid Growths in Children.—Eustace Smith says: (*Lancet*, May 25, 1895) Naso-pharyngeal adenoid growths are common in infancy as well as in childhood. They may even be present at birth. At this early age it is uncommon for them to give rise to the ordinary symptoms of nasal obstructions. Such growths should always be suspected if the infant's nose be broad at the bridge and faintly dimpled on each side at the upper border of the inferior lateral cartilage, and especially if there be noticed any retraction in the inferior region of the thorax. Persistent snuffling in infants is no sign of syphillis in the absence of other symptoms, but rather of adenoids.

Technique of Albumin Testing.*—1. Filter the freshly voided urine. It is important that the urine be freshly voided, because in all stale urine what seems to be a trace of albumin can be found by the test I shall now describe. It is important to filter the urine since, by filtration, sedimentary matters, interfering with the test, are removed. Moreover, it is said that in certain urines the reaction due to mucin may mislead in unfiltered urine.

In order to filter the urine, fold three small, white cut filter papers twice, the second time at right angles to the first. Insert the papers into a small glass funnel, set the tube of the funnel into a tall *narrow* test-tube, and pour the urine into the funnel-shaped pouch made by the filters. [I advise use of three papers rather than one, because in my experience nearly all freshly voided urine filters clear through three thicknesses of paper. More are not advisable, because of danger of traces of vegetable albumin.]

The urine filters slowly through into the test-tube and is *clear*. Let it fill the tube *three fourths full* Wipe off the inside of the tube with a rag until it is entirely clean and bright. Hold the tube up to the light and see that both tube and urine are entirely clear and transparent.

2. Boil the upper stratum of the urine in an alcohol lamp-flame. This is done by holding the tube *by the closed end* with the thumb and forefinger of the right hand, inclining it over the flame in such a way that the latter heats the urine about half an inch from the surface of the liquid. Use an alcohol flame so as not to crack the tube by too great heat. Do not let the flame at any time touch the tube above the surface of the liquid. Nearly all beginners fail to observe this precaution, with the result that the tube is decapitated, so to speak, loses the upper quarter as neatly as if chopped off.

Boil *thoroughly* thirty secends, removing from flame whenever the urine threatens to boil over, but do not boil the lower half of the urine at all.

3. Add three to six drops of 20 per cent. acetic acid to the boiling urine. Shake to and fro gently until acid and upper stratum of urine have thoroughly mixed; then boil again for say thirty seconds.

4. Hold the tube against a dark background, as the coat sleeve, or better still, hold it below a window sill of a north window, or any window where there is no direct sunlight.

A. If albumin is present the upper heated acidulated quarter, or possibly third, is now distinctly turbid as compared with the lower, cool, remaining portion of the urine. If *much* albumin is present, the whole upper third or half of the urine is milky and flocks soon begin to fall. If only a *moderate amount* of albumin is present the upper quarter or third is cloudy. If there is a distinct turbidity which cannot be seen when the tube is held *up* to the light, we call it a *plain trace*. If there is an indistinct turbidity of the same character, requiring careful adjustment of eye and background, in order to see it, we call it *a trace*. If the turbidity is faint, and only seen with great difficulty, we call it a *faint* or *doubtful trace*. Such faint traces may possibly be due to mucin and not to albumin at all. They may be observed in the urine of nearly all women. [Women who have leucorrhœa are nearly always found to have anywhere from a faint to a plain trace of albumin in their urine. In such cases a vaginal tampon should be used, before the urine is avoided for examination, or a cleansing vaginal injection taken.]

B. If no albumin be present in the urine, nothing will be seen, the upper heated acidulated portion of the urine resembling the lower in appearance.

C. If the urine be of deficient acidity, it will become cloudy when heated, owing to precipitation of *earthly phosphates*. (See October and November *Current*.) The addition of six drops of the acetic acid and gentle to and fro shaking will usually dissolve the phosphatic cloudiness, and the urine becomes *nearly* clear in cases when albumin is absent, but *more cloudy still* if albumin is present.

Now, then, in nearly all cases when the acetic acid apparently dissolves the phosphatic cloud, careful observation will show a faint haze to remain. If this haze is really faint, and is not appreciably increased by further heating, I usually assume albumin to be absent. At any rate, adding acetic acid first to such urines, before boiling, and thus preventing the phosphatic cloudiness from forming, usually prevents any haze from appearing and this order of testing may be followed out in doubtful cases. Why not, then, it is asked, always add the acetic acid *first* to the urine before boiling? It is possible that there is no real objection to this order of procedure, but the statement has been made that when albumin is present in small quantities in acid urine, acidifying still further makes the albumin soluble when the urine is boiled, so that there would always be need to take the reaction beforehand, and to use judgment as to the amount of acid to be added, and so on. I have not investigated this question sufficiently to know the real merits of the case, but I have tested 3,000 samples of urine, according to my method above described, adding the acetic acid *after* boiling, and very seldom have found it necessary to repeat the operation and to add the acid first. I think it was Ultzmann of Vienna who preferred to add the acid after boiling.

If now, after boiling, a cloudiness appears, which, however, apparently disappears when acetic acid is added, but if after further boiling a cloudiness in the upper portion is now again plainly seen, a plain trace of albumin is present, which was not seen at first, owing to the phosphatic cloudiness, and may not in the end be as noticeable as was the phosphatic cloudiness. Do not mistake a ring shaped coagulum of phosphates remaining half way down the tube for albumin. This merely means that the acetic acid has not yet reached the lowest stratum of phosphatic cloudiness. The coagulum of albumin is to be seen in the *upper* part of the tube, always when it is present.

Lastly, in strongly alkaline urine, which forms when the acetic acid is added, be not sparing of acid, for the albumin in it is alkali-albuminum, and will not be fully coagulated by heat until the alkalinity is overcome by the acid. In such cases, which are not very common, if *freshly voided urine* is tested, add acetic acid, drop by drop, and take reaction of the upper quarter with blue litmus paper, continuing to add acid until the blue slip is turned bright red, then boil again.

For adding the acetic acid a medicine dropper is useful. Three drops may be added to urines which do not become turbid on boiling, but five or six will be necessary in cases where a cloud appears with heat alone.

The object of adding acetic acid is two-fold; first, to dissolve any phosphatic cloudiness; second, to convert alkali-albumin into albumin coagulable by heat.

The advantages of acetic acid over nitric acid are twofold; first, the acid is neither dangerous nor corrosive; second, it does not act on the coloring matter of the urine as does nitric acid. Plain traces of albumin shown by the heat and acetic acid test appear as faint or doubtful traces when the heat and nitric acid test is used.

Incipient Cataract.—Of extremely great practical value is the suggestion made by Dr. A. R. Barker, of Cleveland, in the *Journal of the American Medical Association* (October 18th), that incipient cataract is not infrequently a local manifestation of a general condition, and that if this condition be looked for, found and appropriately treated, the cataract may, in many cases, be held in check. In conclusion, Dr. Barker suggests that in all cases of incipient cataract: 1. The urine should be examined chemically and microscopically; 2. The general health should be carefully interrogated; 3. All errors of refraction should be corrected; 4. A careful examination of the fundus oculi should be made; 5. That the patient receive such general and local treatment as may be suggested by the above inquiries; 6 That a few carefully reported histories of cases from incipiency to maturity would be of more value than statistics of hundreds of successful operations; 7. That if operative interference becomes necessary, it should be instituted at the earliest possible moment, before the general health becomes impaired, preferably by Knapp's method of peripheral capsulotomy, with an iridectomy, either at the time of the operation or some time previously.

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* Dr. Clifford Mitchell, *Medical Current.*

The New York Medical Times

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EVERY SUBSTANCE WHICH, IN LARGE DOSES, ABOLISHES THE PROPERTY OF AN ORGANIC ELEMENT, STIMULATES IT IF GIVEN IN SMALL DOSES.

—*Claude Bernard.*

THE UNIVERSAL ETHER.

"I HAVE long held an opinion," said Faraday, "amounting to a conviction; in common, I believe, with many other lovers of natural knowledge, that the various forms under which the forces of Nature are manifest *have one common origin*; or, in other words, are so directly related and naturally dependent that they are convertible, as it were, into one another, and possess equivalents of power in their action."

It has been thought by many of our modern savants that electricity gives us the key-note which may yet open the door to the arcanum in the evolution of planetary life. In this connection the studies of M. de Narkiwicz-Iodko, Member of the Imperial Institute of Medicine at St. Petersburg, are full of interest. This learned gentleman recently brought to the attention of the Academy of Science, in Paris, a series of photographs he had taken of the electric spark. When we consider that the mean intensity of the electric spark lasts 0.000,000,868th part of a second, the difficulty of leaving the impression on the sensitive photographic plate is obvious. These plates were doubly interesting, as showing the profound connection between electricity and the human organism.

Considering electricity as a vital primal force, from which all the others proceed by the successive transformations of Nature, M. de Narkiwicz thinks that man, product of that nature, and plunged within that atmosphere charged with electricity, ought to imbibe the unknown force which has caused him to live. He sees in man a mutable electric pile, which remains in contact with the middle ambient, through the constant exchange of electric fluid, called by him the vital principle. The French savants, to whom this series of photographs have been presented, are examining still further the wonderful results of M. de Narkiwicz's marvelous skill in photographing magnetic sparks obtained by him from the surface of the human body. These proofs take the form of a luminous ball, presenting more or less brilliancy, taking on delicate forms of arborescence, such as trees, plants, etc., according as to whether the subject may be anæmic, nervous, sanguine, or exceptionally vigorous. In the latter case the image on the plate appears to be a veritable explosion of electric molecules.

It is only a few years back since the late Prof. Tyndal ushered us into a new world, peopled with the most gorgeous airy shapes, phenomena of the most ravishing beauty. The vapors of certain volatile liquids, nitrates, iodides and acids are subjected to the action of concentrated sunlight or to the concentrated beam of the electric light, in as experimental tube lying horizontally, in such a manner that the axis of the tube and that of the parallel beams of light are coincident. The vapor forms clouds of gorgeous tints, arranging themselves into the shapes of cones, shells, tulips, roses, sunflowers, leaves, etc. In one case, he says, the cloud bud grew rapidly into a serpent's head; a mouth was formed, and from the cloud, a cord of clouds resembling a tongue was discharged. Once it assumed the form of a fish, with eyes, gills and jaws. The twoness of the animal form was displayed throughout, and no disk, coil or speck existed on one side that did not appear on the other. Strange as it may seem, the tracing by our scientists of the evolution of that subtle principle which they have baptized as the Universal Ether formed in part the teaching of the Vedas thousands of years before the Christian era, and which are now being revived in the successive steps in the investigations of modern thought.

ELECTROLYSIS FOR THE TREATMENT OF STRICTURES.

DR. I. A. FORD, Professor of Anatomy in Ecole Pratique, Paris, read before the section in Genito-Urinary Surgery, New York Academy of Medicine, Nov. 12, 1895, an interesting paper illustrated with cases, on a new instrument he had recently devised, called the electrolyser, he said:

It is a well known fact that electrolysis has been discarded on account of the imperfect instruments which were used. My electrolyser has all the advantages of the urethrotome and none of its inconveniences. It looks like a small whip, of which the handle contains a metallic wire projecting from the end which connects with the flexible part. This instrument, being first introduced into the urethra, is connected with the negative pole of a continuous current battery, and the positive pole is connected near the affected part, on the front of the thigh or over the pubes; then the current is turned on.

The operation, which is almost painless, requires thirty seconds (on an average), with a current of a strength of at least ten milliamperes, as indicated by means of a galvanometer. The electrolyser remains perfectly cool during the operation. In nearly all cases there is no bleeding, or but very little. The urethra is made aseptic before and after the operation, in order to prevent fever. I never allow a sound to remain permanently in the urethra for any length of time after the operation.

Usually the wound resulting from electrolysis heals quickly without any local treatment whatever, and often the patient can attend to business immediately after the operation. In nearly all cases I pass a sound the third day after the operation, also the day after. I instruct the patient to pass a sound, No. 22 or No. 24 F., every month and every other month.

With the urethrotome, which cuts blindly, the surgeon cannot ascertain the degree of density of the tissue of a stricture. On the contrary, by means of electrolysis, which merely produces a molecular destruction of the stricture, although the instrument remains cool, I have been able to demonstrate that there are two classes of strictures—"soft and hard." Hard strictures are in the proportion of one against five soft ones.

The time required to perform the operation varies with the density of the stricture. Some strictures are so hard that they cannot be successfully operated upon by electrolysis.

If my American colleagues who are familiar with the French language are willing to refer to one of my books entitled "Traitement des rètrecissements par l'elèctrolysis linèaire" (this book can be procured at the library of the Academy of Medicine), they may find it quite interesting, as it will enable them to understand the improvements which have gradually been introduced in the applications of electrolysis to surgery during the last fifteen years. They will also understand how I have applied electrolysis to the treatment of strictures of the urethra, uterus, rectum, and œsophagus.

Up to date, I have performed in Europe 135 operations on strictures of the œsophagus (recorded in my book), and with the exception of those which were caused by malignant growths of the wall of the œsophagus all recovered.

EXPECTORATION.

THE old Yale student will recall the bitter invectives of the elder Prof. Silliman against the filthy habit of expectorating upon the floor. A man who would be guilty of so filthy an act was a hog, and his lecture-room was no place for him. He preferred lecturing to gentlemen. This was before the days of antisepsis, and was based upon the disgust of a gentleman at the filthy habit of throwing the excretions of the body upon the floor, to be pulverized into dust and inhaled through the air into the living body. To the bacteriologist of the present day this violation of the law of cleanliness is something more than a filthy habit; it is an offence against health amounting to an unwritten crime. The fact has been demonstrated that the expectoration may be filled with germs which, pulverized into dust, may be inhaled into the lungs, planting in the healthy body the seeds of disease and death. Suddenly a malignant disease breaks out in the family, and extends from one member to another and from one neighbor to another. There has been no exposure, no apparent violation of the laws of health. How does it suddenly appear in the home so carefully guarded? The dress of the mother or the sister, as it sweeps the sidewalk or the floor of the stage or car, has probably gathered into its folds the poison germ from diseased bodies, to be distributed in the home, to ripen in a harvest of suffering and death. We are glad that the bacteriologists connected with the boards of health of this and other cities are calling attention of the public to the damage to the public health from this source of pollution. Would it be too much to ask that the pulpit bring the aid of its powerful influence to its repertory of sins to be avoided, this offence against decency and health? The question, so easily settled by force of public opinion, would be exceedingly difficult to handle by process of law, other than that inherent law of Christianity, to avoid at all time and in every place doing evil.

LEPROSY.

THE serum treatment now extensively employed, and with marked success, in various diseases, is constantly extending its curative sphere of action. Its latest triumphs come to us from the report of Dr. Carasquilla, of the Republic of Colombia, who was the first to employ and introduce to the attention of the profession an anti-leprous serum, with which he has been comparatively successful in those forms of leprosy hitherto considered incurable. After giving in detail several cases of tubercular leprosy of more or less severity, which yielded to treatment within a month, he gives a picture of the action of the remedy as shown in the successive stages of the cure. The disappearance of the œdema, the flattening and softening of the tubercles, the healing of the ulcers, and the return of a healthy appetite, form, as given by the author, a vivid picture of the triumphs of the serum over the disease. Dr. Carasquilla promises in a short time to give to the profession his manner of preparing and using the anti-leprous serum, which we shall give to the profession as soon as it reaches us. In this connection it may not be out of place to state that the first experiments with the serum therapy were made by Dr. J. Robie Wood, formerly a member of the Medical Board of the Metropolitan Hospital, many of which were made while in connection with that service. We hope to persuade Dr. Wood to give the result of his experiments in the TIMES.

INSOLUBLE DRAGEES.

THE pharmacist is usually very careful in his manipulation of pills and compressed tablets that the compression is not so great but what it can be broken up in the stomach or the coating of sugar or gelatine of such a character that it will readily be dissolved when subjected to the gastric juice. We have known cases where the sugar coated pills have passed through the intestinal canal unaltered. The *Pharmaceal Journal* mentions a case where the intestinal canal was so impacted with tablets as to render an operation necessary. A patient had been taking under the advice of a physician salol tablets for some time before it was apparent intestinal obstruction existed of so grave a character as to require an operation, when it was found the intestine in the region of the cæcum was packed with the salol tablets unabsorbed.

The *Journal* says, in commenting upon the case, that the more freely comminuted and loosely packed an insoluble or difficult soluble remedy, the easier it is absorbed by the system, and consequently substances like salol should never be given in tablet form.

THERE is no doubt that a man has a right to conduct his business in his own way, and on the other hand, the profession has the same right to an opinion as to propriety.

This subject is brought to our attention at this time by a discussion which is being carried on regarding the conduct of certain manufacturers in appealing to the public for the sale of their products.

It is well-known that certain houses have used the profession to introduce their goods, and after getting this endorsement, have gone to the public direct, through various means of advertising.

It is not strange that the profession should withdraw its support under these circumstances, and recommend preparations that are not hawked to the public.

Physicians are naturally jealous of their prerogative, and it is fair to presume that they are better judges as to the individualization of drugs and foods than those who have given little study to the subject, to say nothing of their fitness for such efforts. The unprejudiced physician would doubtless make a wiser selection of these means than the one who is to benefit by their sale.

The public will sooner or later become aware of these facts, and the decision will be in favor of the profession.

No progressive physician will refuse to examine into the merits of any new preparation, and, as a rule, can be depended upon to do justice both to the vender and to the public.

Testimonials, from whatever source, are of questionable value, as they are obtained too generally upon little knowledge, and less real experience, and may be purely imaginative. They are often simply fictitious, and intended only to boom a product from impure motives.

It is natural for an inventor or a discoverer to wax enthusiastic over his new boon, sometimes honestly, and sometimes because there is bread and butter in it.

The last decade has experienced a host of these cure-alls, and each has attempted to pursuade or to bully the profession into endorsing them. Failing in this, an appeal has been taken to the public, in some cases, we are sorry to say, with apparent success.

The members of the profession cannot be too careful as to how they endorse new articles which may become nostrums.

Pure, decent, honest ethics demand that we should be most careful as medical men, in lending our influence to the doubtful or unclean.

As guardians of public health, we should go slowly in these matters, no matter how high the source.

Koch's method, Brown-Sequard's animal extracts, antitoxines and hosts of other means have been tried, and found to be far from what was expected of them. Rarely does an agent meet expectations as has the wonderful cocaine, for instance, but such instances encourage us to go on trying all things, and holding fast to that which proves to be good.

A ROYAL M. D.—The Queen of Portugal, the daughter of the late Comte de Paris, after two years of hard study has passed her medical examination with flying colors, and secured the degree of Doctor of Medicine, being the first lady of royal birth who has acquired the distinction of adding the letters M. D. to the Regina which follows her name.

Queen Marie Amelie's taste for this particular branch of science may be said to date from the time of the discovery of the serum of diphtheria. Portugal is a country that suffers probably more than any other in Europe from this frightful scourge, the lack of cleanliness of the people, as well as their indifference to even the most elementary rules of sanitation, contributing in a great degree to the ravages that it commits. On hearing of the serum she at one took steps to have it introduced into her adopted country, but encountered the greatest opposition, not only among the people themselves, but also on the part of the medical profession at Lisbon. Once convinced of its efficacy, however, she set to work to remove the disfavor with which it was regarded. She surrendered her riding school, as well as a number of her horses, to those intrusted with the production of the remedy, and then, with the object of removing all popular apprehension as to the alleged dangerous character of its effects, caused herself to be publicly innoculated therewith. Needless to add that the operation in no way impaired her health, while it has since enabled her to visit the diphtheria wards of the metropolitan hospitals, and to assist in the nursing and medical care of the patients, without the slightest danger of contagion.

Her Most Faithful Majesty might have remained content therewith had it not been for the health of her husband, Dom Carlos. The latter, in spite of his merry, fat face and jovial demeanor, is far from possessing a strong constitution. He suffers from excessive obesity, and during the last year or eighteen months his corpulence has increased to such a rate as to seriously alarm his regular physicians and relatives. Specialists were called in, and for a time he was subjected to a severe regimen. Finding that it had no appreciable effect in diminishing his girth, he cast dietary and medicinal regulations to the winds, and declared that he would no longer submit thereto. Thereupon his wife announced that she would undertake the treatment of his case, and it was with the object of being properly qualified to do so that she set to work to go through the course of study needed to enable her to fulfill the duties of a physician.

INSOMNIA.—The attention of the weary, restless watcher, through the long hours of the night courting in vain the soothing influence of sleep, is being attracted to a new remedy more potent than narcotics or hypnotics, and followed by no unpleasant after effects. That remedy is the bicycle, which is doing for the tired brain and the restless spirit and the sluggish circulation what drugs or any other form of exercise often fail to accomplish. A spin on the bicycle in the evening or the afternoon will do more to promote digestion, regulate the circulation, quiet the brain, and get the whole system into that harmonious condition called health than any amount of drugs, unless there should be some positive lesion requiring local or general medication of a more specific character. A look into the annual cycle show in the Madison Square Garden, where every day from fifteen to twenty thousand people inspected the vast array of wheels, gives some idea of the tremendous hold this comparatively new means of locomotion has taken upon the public. We notice an improvement each year—this year's wheel being constructed on principles calculated to give greater strength and beauty than its predecessors. More improvements have been made on the ladies' wheels than on the men's, and yet much is required to make the ladies' saddle all that is needed. To this feature we suggest the special attention of inventors be addressed in the near future.

NEW JOURNALS.—*The Journal of Experimental Medicine* will be under the editorial care of Dr. William H. Welch, Professor of Pathology in the Johns Hopkins University, who will be assisted by a board of twelve associate editors. The ability of the editor gives promise of a journal of marked scientific interest. The

State Hospitals' Bulletin will be edited by a staff of hospital superintendents, the editorial committee the first year being Drs. P. M. Wise, C. W. Pilgrim and S. H. Talcott. The journal will be devoted to reports of clinical and pathological work in the New York State Hospitals for the Insane and the laboratories connected with them. A journal of this kind has long been needed as a stimulant to thought and a record of careful observation in a line of study which is every year exacting more attention. Both of these journals can hardly fail to be valuable acquisitions to the medical periodical literature of the day.

EXALGINE.—It is claimed that this new preparation is an ideal analgesic, specially indicated in pain of a functional nature, and not dependent on mechanical causes or organic lesions. A febrile condition contra-indicates the drug, which should only be given in cases in which elevation of temperature is not a marked symptom. In megrain, facial neuralgia, sciatica, intercostal neuralgia, and in all cases where pain is a prominent feature, without elevation of temperature, the remedy is coming into active use. It may be given in tablets, wafers or cordial, in doses from a half to two grains every two or three hours.

IN the December issue of the *American Homœopath* we read an obituary of the *Pacific Coast Journal,* written in Dr. Kraft's most brilliant style. In looking over our exchanges the other day we found No. 1 of the new year of the reputed defunct journal as bright as ever. We involuntarily exclaimed such a lively corpse could never be found outside of California. "On the cold cheeks of death smiles and roses are blended, and beauty immortal awakes from the tomb," We congratulate the profession in the reincarnation of the California journal.

HARVARD UNIVERSITY MEDICAL School announces that on and after June 1901, candidates for admission to the medical departments must present a degree in arts, literature, philosophy, science or medicine, from a recognized college or scientific school * * * Also satisfactory proof of a course in theoretical and descriptive (inorganic) chemistry and qualitative analysis. Thus "Old Harvard" places itself beside Johns Hopkins and its requirements for admission. The step is not premature, and the other colleges of standing must follow this example, the sooner the better.

PEDRIATICS.—With the January issue the *Archives of Pedriatics* passes into the hands of Mr. E. B. Treat, the well-known medical book publisher. With an increase of 20 per cent. in text, entirely new type, increased business energy, the journal, which has always been a favorite with the profession, will extend its field of usefulness to a vastly increased clientele. We wish it the success it so richly deserves in a specialty which is every year increasing in importance.

ALCOHOL.—According to the report of the Surgeon-General, alcoholism is on the decrease in the army. In 1890 no less than seventeen posts had more than 10 per cent. of their average number under medical care for drunkenness; in 1891 eleven posts; in 1892 ten; in 1893 seven, and in 1894 four. What is true of the army may be said in almost every department of life. Inquiries at several of the most fashionable bars in the city have revealed the fact that not one-quarter of mixed drinks are prepared that there was five years ago. The use of narcotics and hypnotics is markedly on the increase, and may be doing more harm than the former excessive use of alcohol.

THE *Medical News* of Philadelphia has removed to this city, with Dr. J. Riddle Goffe as editor.

Lea Brothers & Co., the well-known house, still continue as publishers.

While this announcement seems ominous, the publishers say that it has not been done without careful consideration.

We are glad to welcome the *News* as one of the ablest of our contemporaries, and with its change of base and its new editor, we have no doubt it will continue to rank as it has in the past, as one of the first.

The publishers leave us to conjecture why they were "irresistibly drawn to New York," but we will accept the compliment at any rate.

HONOR AMONG BOYS.—As a mark of distinction boys in the upper forms at Harrow wear tail coats. When Dr. Vaughan was master he caught a boy, whom he discovered out of bounds, by one of these tails, though the fellow managed to break away, leaving the tail in the master's possession. The next day Dr. Vaughan expected to find the discovery of the culprit an exceedingly easy matter, and was very much surprised when he discovered that, unlike the foxes in the fable, all the boys in the form had cut off their tails in the same way.

BIBLIOGRAPHICAL.

Dr. King's Medical Prescriptions. Containing the favorite formulas of the most eminent medical authorities, collected from their published writings. By John H. King, M. D. Second edition; New York: Bailey & Fairchild Company, 1896; pp. 346, octavo.

This little book is just what its title indicates, and will be found very suggestive in the writing of prescriptions.

Hints and Suggestions as Aids in the Care and Preservation of the Teeth, and the Relation of the Dental Organs to Our Health. By Chas. G. Pease, M.D., D.D.S., Professor of Oral Surgery in the Metropolitan Post-Graduate School of Medicine, etc., etc. Published for the benefit of the laity. New York: Boericke, Runyon & Ernesty, 1895.

An interesting and useful little book for the purpose indicated.

Eleventh Annual Report of the N. Y. Post-Graduate Hospital.

The work of this excellent institution for the past year shows 1,735 patients treated in the house, 19,227 in the out-service, with 87,706 visits, and 493 patients have been attended in their homes. Strict means are employed to prevent any but the poor from being treated. During the year 550 practitioners of medicine have attended the sessions of the Medical School, where every facility is afforded for practical study with the ablest teachers.

The January issue of the *Century Magazine* is unusually rich in literary historical biographical and scientific matter. Mariner, Craw Jock, is at his best in his "Daydream in Rome," and the "Antarctic Continent," by the first white man to set foot on this land, in its graphic narrative of thrilling incidents far exceeds any work of fiction. Prof. Sloane's "Life, of Napoleon" and "Sir George Tussady," by Mrs. Humphrey Ward, are of course among the most attractive features of the magazine.

P. Blakiston, Son & Co., of Philadelphia, announce a book on "Appendicitis," by John B. Deaver, M.D., Assistant Professor of Applied Anatomy, University of Pennsylvania; Assistant Surgeon to the German Hospital, etc. The book will be arranged in a practical and systematic manner. The history, etiology, symptoms, diagnosis, operative treatment, prognosis, and complications of this disease will be given in the order named. It will contain about forty illustrations of methods of procedure in operating, and typical pathological conditions of the appendix, the latter being printed in colors.

Therapeutics of Surgery and Childhood. By A. Jacobi, M.D. Philadelphia: J. B. Lippincott Co., 1896.

Dr. Jacobi has been for many years an industrious practitioner, writer and teacher in the specialty of children. His articles are always scholarly, thoroughly practical, giving evidence of much thought and of intelligent research. In the present volume the author has condensed, with excellent results, the studies of a life of hard professional work. He says in his preface: "A large part of this work is devoted to diet and hygiene, a good deal to the consideration of the action of medicine. Indications for the administration of medicine are furnished by etiology and symptomotology. Without a diagnosis of the morbid process and its evolution, and without its appreciation of its influence on the patient no rational therapy can be thought of. I have, therefore, taken particular pains to offer clear, though brief, statements of differential diagnosis." The profession, through the numerous monographs of the author which have appeared, are familiar with his clear style of conveying information, and will welcome to their libraries the present volume.

The Functional Examination of the Eye. By J. Herbert Claiborne, M.D.; 100 pp., with illustrations. The Edwards & Docker Co., Philadelphia, publishers; 1896.

This book consists of a number of lectures delivered at the New York Polyclinic, and to the graduating classes of the College of Physicians and Surgeons, New York. The author's purpose is to make the subject of fitting glasses clear to any one. Particular attention has been given to the subject of astigmation. The material has been so arranged that the chapter on presbyopia contains the substance of all that has gone before. The chapters on refraction and mychrotics are concise and excellent. Price, $1.

"Popular Science News."—To those who wish to keep pace with new thoughts in science, and have no time to read the elaborate essays of the scientific quarterlies, we commend *Popular Science*, now in the thirtieth year of its publication, with a stronger life and more vigorous strength infused into it by its new management. We give as a specimen of some of the good things it contains every month the title of its leading articles for February: "Is Mars Inhabited?" "Venom of Serpents," "The Boomerang," "Motors Past and Present," "Our Debt to Alchemy," "Hawks and Owls," "Commercial Monstrosities," "Mind Reading," "Metric System Simplified," "Petroleum and Natural Gas," etc.

A Manual of the Practice of Medicine. By George Roe Lockwood, M.D., Professor of Practice in the Woman's Medical College of the New York Infirmary; Attending Physician to the Colored Hospital and to the City (late Charity) Hospital; Pathologist to the French Hospital; Member of the New York Academy of Medicine, of the Pathological Society, of the Clinical Society, etc. With seventy-five illustrations in the text and twenty-two full-page colored plates. Philadelphia: W. B. Saunders, 1896; pp. 936; octavo.

The author has aimed in this volume to present the characteristic facts and principles of his subject, in a concise form, for the purpose intended. His classification is after Osler, therefore excellent.

There is no doubt of its becoming a popular text-book, and it will save the student an immense amount of time when he most needs it, during his college course.

An Atlas of Ophthalmoscopy, with an Introduction to the Use of the Ophthalmoscope. By Dr. O. Haab, Professor of Ophthalmology, University of Zurich. Translated and Edited by Ernest Clarke, M.D., B.S. (Lond.), Fellow of the Royal College of Surgeons, Surgeon to the Central London Opthalmic Hospital, Opthalmic Surgeon to the Miller Hospital, etc. New York: Wm. Wood & Co.; 1895; pp. 55 and plates; large 12mo.

This little book is the first of a series of hand atlases upon various branches of medical and surgical science which the publishers propose to issue, which, for accuracy, beauty and compactness is believed to exceed anything heretofore produced, and the sample before us certainly bears out the announcement.

The plates are superbly printed in colors, and at a price never before approached for cheapness. The scientific faithfulness to Nature is vouched for by the best authorities. The descriptive text is printed for convenience on the page facing the plate.

The scheme at present embraces five subjects, each covering about 200 pages, 5 by 7½ inches in size, and includes: 1. Ophthalmoscopy; 2. The nervous system in health and disease; 3. Fractures and dislocations; 4. Anatomical atlas of obstetrics, diagrams and therapeutics; 5. Gynæcology. The series will be sold by subscription, at $15 for the set.

The well-known standing of the publishers is sufficient guarantee of the physical part of the work.

The Pocket Record Sheet.—The Pocket Record Sheet may be used with the old ledger, or any other visiting list may be used with this office ledger; but where these books are used together the abbreviations are found to correspond. The Pocket Sheet may be begun at any time of the year without loss of space, being perpetual. It is used from day to day, just as we have been accustomed to use the old style of bulky visiting list, until full; when. owing to its peculiar construction, it can be opened full length on the desk, showing more entries at once than can be seen in any other weekly or monthly pocket list published. It is the most perfect thing of the kind that we have seen. Address all communications to Dr. Alexander F. Horton, 242 Quincy street, Brooklyn, N. Y.

The American Year-Book of Medicine and Surgery, being a yearly digest of scientific progress in all branches of medicine and surgery, drawn from journals, monographs and text-books of the leading American and foreign authors and investigators, with a staff of editors for each department, under the general editorial charge of George M. Gould, M.D., profusely illustrated with numerous wood cuts in text, and twenty-three handsome half-tone and colored plates. Philadelphia: W. B. Saunders, publisher, 1896.

The editor, in his preface, says: "It is confidently believed that no very significant fact has escaped review in the present pages; the material used has been not only the periodicals of the year, but often the more important monographs, text-books, etc. Judicial criticism is also desirable, not only to select and summarize, but also to pronounce decisions upon proposals, and to prevent useless experiments upon others. Without being too dogmatic, it has been the aim of the departmental editors to pronounce such needed judgment upon new suggestions or upon matters in dispute. The list of departmental editors has been made up from the ablest specialists in the country."

An American Text Book of Surgery, for Practitioners and Students. By Charles H. Burnett, M.D.; Phineas S. Conner, M.D.; William W. Keen, M.D.; Charles B. Nancrucell, M.D.; Roswell Park, M.D.; Frederick S. Dennis, M.D.; Lewis S. Pitcher, M.D.; Nicholas Sinn, M.D.; F. I. Shepherd, M.D.; Lewis A. Stimson, M.D.; William Thompson, M.D; J. Collins Warren, M.D., and William White, M.D. Edited by William W. Keen, M.D, LL.D., and J. William White, M.D., LL.D. Second edition, carefully revised. Philadelphia: W. B. Saunders; 1896.

The first edition of this work, coming from American authors and specially representing American surgery, attracted more than usual attention, not only in this, but also in other countries. It was seen that in versatility, in originality of invention, and in turning the ideas of others to a more practical use, the American surgeon had no superior in the world. Of course, in a purely American work, criticism was challenged at home and abroad, and that criticism, kindly given through medical journals, and in the lecture room, has been utilized in the second edition to make the work in every way more complete. Among the changes in the text, we notice the effect of modern small arms in military surgery, and very important suggestions in the surgery of the skull, the spine, the chest, stomach and rectum. The important chapter on displacement of the uterus has been rewritten, with many valuable improvements. The fact that a large edition has been exhausted in three years, and that the work has been introduced as a text-book into sixty colleges, shows the large place it holds in the estimation of the public.

Surgery. A practical treatise with special reference to treatment. By C. W. Mansell Moullin, M. A., M. D., Oxon., Fellow of the Royal College of Surgeons; Surgeon and Lecturer on Physiology to the London Hospital; formerly Radcliffe Traveling Fellow, and Fellow of Pembroke College, Oxford, Eng. Assisted by various writers on special subjects. With 623 illustrations, many of which are printed in colors, about two hundred having been made from special drawings. Third American Edition. Revised and edited by John B. Hamilton, M.D., LL.D., Professor of the Principles of Surgery and Clinical Surgery, Rush Medical College, Chicago; Professor of Surgery, Chicago Polyclinic; Surgeon, formerly Supervising Surgeon-General, U. S. Marine Hospital Service; Surgeon to Presbyterian Hospital; Consulting Surgeon to St. Joseph's Hospital and Central Free Dispensary, Chicago; Secretary-General of the Ninth International Medical Congress, etc. Philadelphia: P. Blakiston, Son & Co.; 1895; pp. 1250, octavo. Cloth, $6.

The wide scope, clear expression, and excellent illustrations of this superb work, have made it one of the most popular of its class, as shown by the appearance of a third edition in so short a time. The text has undergone thorough revision wherever necessary, and many new illustrations have been added. The additions by the American editor are both practical and valuable.

The author devotes little space to controversial subjects, and has endeavored to make his work eminently practical, especially in the direction of treatment.

The author also enforces the idea that the chief aim and object of his art is to assist the tissues in every possible way in their struggle against disease. The book is a splendid epitome of the main principles of modern surgery as they appear to-day.

Materia Medica and Therapeutics. A Practical Treatise with Especial Reference to the Clinical Application of Drugs. By John V. Shoemaker, A.M., M.D., LL.D., Professor of Materia Medica, Pharmacology, Therapeutics and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, Philadelphia, etc., etc. Third edition, thoroughly revised; reset with new type and printed from new electrotype plates. Royal octavo, pp. ix, 1108. Extra cloth, $5 net; sheep, $5.75 net. Philadelphia: The F. A. Davis Co., publishers, 1914 and 1916 Cherry street.

In this edition the author has combined his excellent work into one volume, which is an improvement. We have no hesitation in saying that according to our judgment the work is far in advance of any of its class in the direction of individualization of the means of treatment of disease, and that is what must be appreciated if we would succeed in practice. We entirely agree with the assertion that "we should be physicians in the broadest sense of the word," and if we would be such we cannot be dogmatists.

The table of contents includes a great variety of means and methods besides drugs, and the chapter on dietetics will serve as an excellent introduction to the study of this important branch of treatment, which can be supplemented as occasion requires.

We also find electricity, massage, oxygen, heat and cold, hydrotherapy, music and many other subjects intelligently treated and made practicable.

We have no hesitation in commending this book to students and others who require a down-to-date work in this department.

If space permitted, we would reproduce here the "table of contents," which we are confident would be of interest to our readers, but the next best thing we can do is to suggest a perusal of the volume, or if that is inconvenient, correspondence with the publishers, with a view to deciding any question as to whether the book is wanted.

The man of science and the poet equally will miss the truth, if either one or the other deals boldly with Nature, instead of invariably following her guidance; if he seals his heart against her sweet influences; if he has a theory to maintain, a solution which shall not be disturbed, and one possessed of this false cipher, he reads amiss all the golden letters around him.

CORRESPONDENCE.

SOME REMARKS ON "INEBRIETY."—BEING FOR THE MOST PART A REVIEW.

To the Editors of the NEW YORK MEDICAL TIMES:

According to the views of many of our most eminent medical men, inebriety is a disease, and individuals who suffer from it are mentally, morally and legally irresponsible.

A recent writer (*Louisville Medical Monthly*) asks the following pertinent questions:

1. Is inebriety a disease, *per se*?
2. If so, where does the disease begin and habit end?
3. What are the pathological changes which take place as the habit ends and disease begins?
4. If a disease, *per se*, is it hereditary?
5. And if hereditary, why does it not manifest itself equally as between the male and female?
6. If a disease and acquired, what is the correct classification?
7. What shall be done with the inebriate; *i. e.*, what is the most rational treatment?
8. Should he be considered legally as a criminal, and treated as such?
9. Should he be regarded a sinner, and placed under strict moral restraint?
10. Or is medical attention indicated from the beginning of his inebriety?

These questions are of considerable importance, and seem not to have been thoroughly and explicitly elucidated by either "the eminent medical man, the wise statesman, or the philanthropist," though each in turn has contributed much to our knowledge of the subject.

Almost universally throughout available literature the term "inebriety" is employed to designate a condition which in my estimation should be denominated "drunkenness;" or when applied to the diseased condition of the system sometimes resulting from the long-continued ingestion of alcoholic liquors, it should be "alcoholism." In other words, writers are apt to confound the effects produced upon the system, or upon individual organs of the body, by the long-continued and excessive use of alcohol, with the alcohol itself, which leads to synonymous employment of the expressions "inebriety," "intoxication," "inebriation," "drink habit," "drunkenness," and "alcoholism." In order that we may properly interpret an author's meaning, he should be careful to make use of only such expressions as will convey the correct ideas. If he writes "inebriety" when "alcoholism" is meant, we are apt to be misled and base our conclusions upon false premises.

If inebriety be a disease *per se*, a writer states, we are yet in the beginning of our acquaintance with it, and much study of individual cases and delicate investigation in the laboratory will be necessary to single out and classify symptoms and define the minute pathological changes that have been produced by alcohol, to give it a separate position in the category of diseases.

In my opinion the point of primary importance would be to determine if inebriety *per se*, by the most painstaking and careful investigations, can legitimately be included in the category of diseases. While it is true the word is employed by most modern writers to designate a condition caused by the long-continued and excessive ingestion of alcoholic liquors, we seem to be without explanatory evidence as to the definite and recognizable pathological changes produced in the economy, which considered collectively or singly constitute the characteristic *materies morbi*. When these points shall have been determined, next in importance comes "Where does the disease begin and habit end?"

One author claims that periodical drinkers are either primarily, or having become so secondarily, diseased individuals. Another says that if it be admitted that every man or woman who takes one drink of alcoholic liquor is a diseased individual, then as a nation, we are in immediate danger of dissolution; meaning, I take it, that few of us abstain absolutely from alcohol in some of its forms, which is probably true in a certain measure.

The question of hereditary influences as applied to drunkenness, is one that has attracted no little attention, but thus far no definite information seems to have been obtained. A late writer states, although there is no question that alcohol is a poison, and that every tissue of the body is permeated and possibly diseased by it in those who use it as a beverage, our knowledge of the pathological conditions it produces is but in its infancy, while its effect on mankind, in relation to heredity, is as yet but a matter of conjecture.

All agree that the drunkard is likely to beget children with a peculiar irritable or excitable nervous system, which is about as far as we are justified in going at present in speaking of hereditary influences.

Not a few points of characteristic interest are covered by a contributor to a recent number of the *Louisville Medical Monthly*, and with my humble apologies to the author, the following short abstract of certain portions of his article may prove interesting to your readers.

My opinion is that drunkenness (the so-called inebriety or ebriety) is first and last a habit; that *per se* it never has been and never can be a disease. I also wish to contend that drunkenness is not, nor has it ever been, hereditary. Suppose, for instance, that grandfather, father, brother, etc., die the death of the inebriate—from the excessive ingestion of alcohol—what does this prove? I claim nothing, further than the fact that each has become addicted to the use of alcoholic liquors through association, influence and habit. The same rule applies with equal force to the female sex.

It might be well to call attention to statistics concerning drunkenness, which show that the proportion of females is very small. Were the law of heredity true in this connection, the number of female drunkards should exceed that of the male sex in the same ratio that the female population exceeds that of the male. That this is not the case points clearly to the fact that drunkenness not only is not a *disease*, but also that it is not *hereditary*. It seems very charitable to excuse a woman's drunkenness on the grounds of inheritance, but the fact remains that she could never become a drunkard without formation of the drink habit. How could a person become a drunkard (by inheritance) without having tasted alcohol? Could such a position be made tenable for a moment?

It has been stated (Crothers) that the ejection of a tapeworm, removal of a spicula of bone pressing on a nerve, trephining the skull, operation for and removal of a stricture, the curing of hemorrhoids, constipation, diarrhœa, and numerous other conditions, have frequently been followed by recovery from inebriety (drunkenness). Also that a certain number of cases recover from a change of surroundings and living; change of occupation has been followed by complete restoration.

That change of climate, surroundings, sanitary conditions, occupation, etc., has frequently brought about complete restoration from drunkenness, seems to me *prima facie* evidence that the drunkard is not a diseased individual. Did change of occupation ever completely restore a patient suffering from typhoid fever or pneumonia? But the strongest point against the disease theory lies in the fact that no remedy which can be administered will assist the individual unless he possesses an earnest, conscientious desire to reform. In curable *diseases* the patient's wishes need not necessarily be consulted in order to effect a cure.

Drugs may be given, hypodermically or otherwise, that will produce a temporary dislike for alcohol, because of the intense nausea which results, but the habit is not corrected unless the individual desires to reform. If he has an earnest and conscientious desire to reform—if he wishes to quit drinking—I contend that he can do so, if he will. In a majority of instances complete reformation can be brought about without any form of medication or treatment, the individual simply exerting an amount of will-power sufficient to overcome the habit. Of course, moral influences have much to do with complete reformation. Every person should be endowed with an inherent force of will sufficient to overcome habit, as well as to govern his acts toward his fellow-man.

It has been said that nine-tenths of the diseases which we may suffer are self-limited; *i. e.*, they will run a certain definite course, and, vitality of the individual being sufficient, Nature will, in its own mysterious way, combat the destructive elements and bring about complete restoration to health. If this be true of various diseases is it not reasonable to assume that Nature's inherent force is adequate to assist the individual in correcting a habit? The most natural solution of the problem, then, would be this: If a person has formed the liquor habit, and possesses an earnest desire to abandon it and reform, all he has to do is to simply quit drinking—which he can do if he will—and then keep away from companions, associations, influences and resorts which might induce or tempt him to return to his former habit.

I make the statement that a man can reform if he will, with a firm conviction of its practicability, notwithstanding the fact that the vast majority of those whom we regard as authority upon this question claim such a thing, in most instances, an absolute impossibility.

Drugs, when indicated in the treatment of drunkenness, should be in the nature of tonics, and care must be exercised in their selection, lest a condition infinitely more deplorable than the liquor habit be induced.

There are instances in which alcoholic stimulants may be beneficial to the human economy, and where indicated I believe, may be taken in moderation by any man who has a normal will-power, without the production of any bad results.

I believe incarceration in jail or workhouse never benefited a drunkard, or had the happy effect of curing him of the drink habit. As to treatment of drunkenness in hospitals or asylums constructed and especially equipped for the purpose, for obvious reasons this is impracticable in the vast majority of cases. There is no doubt that the environments of an especially equipped asylum may be made to reach a state of perfection which cannot be obtained elsewhere, and for this reason only may the drink habit best be corrected in such an institution. I would therefore recommend this plan in selected cases. By selected cases, I mean those in which the moral and social influences at home are markedly unfavorable.

The idea that a drunkard can be *forced* to reform by confinement in an asylum, against his inclination, be the surroundings and influences, social, moral and otherwise, never so favorable, in my opinion is an impossibility. He will be without liquor just so long as he is absolutely compelled to abstain, and no longer. Without the desire to reform, no effort will be made on his part to do so, and as a matter of course no permanent good will be accomplished by confinement or forced temporary abstinence.

Louisville, January, 1896. C. C. MAPES.

CANTHARIDES IN NEPHRITIS.

To the Editors of the NEW YORK MEDICAL TIMES:

I notice in the NEW YORK MEDICAL TIMES a communication from a Dr. Dessau, of New York, in which he says that Dr. Clifford Mitchell, of Chicago, has paid no attention in his work on Kidney Diseases to the action of cantharides on the kidneys.

This is only not correct, as may be seen from a careful reference to Dr. Mitchell's book, but I distinctly remember that ten years ago, when I was a first year medical student, Dr. Mitchell referred to the action of cantharides in his lectures on the treatment of nephritis, and I have used it since successfully in post-scarlatinal, diphtheritic and other forms of nephritis.

I would suggest that Dr. Dessau read, and quote *the whole* article on cantharides, on pages 205 and 206 of Dr. Clifford Mitchell's book, including the clinical notes of its use in *acute* and *chronic nephritis*, in which no mention whatever of the bladder is made. Moreover, if Dr. Dessau will read Dr. Clifford Mitchell's article on acute scarlatinal nephritis, published in Dr. Tooker's work on diseases of children, page 444, he will find due credit given to Dr. Jousset, of Paris, for the use of cantharides in this disorder. Respectfully, W. S. WHITE.

Chicago, Jan. 6, 1896.

FANTASTIC PRESCRIPTIONS.

Some years ago, writes a physician (*Progres Medicale*), I was called to Djoahne Sidtleometzhler. His symptoms were complicated and peculiar, and led me at first to suspect that he had swallowed his name. But a more thorough examination convinced me that he was affected with typhomalariopneumophthisicotrichinotetanoataxiopheticosphenitis. In view of the ubiquity of pathogenic bacilli, antiseptics are always indicated, and I prescribed the following:

Betanaphtolalphamono sulphate of lime with salicylaldehyde phenyldimethylpyrazolene. His wife asked me with what disease her husband was attacked. I told her. She said, "Yes?" and immediately became alarmingly pale. On examining my patient the next day, I was convinced that the vital forces had perverted the action of the remedies, and there had resulted a series of retro-absorptive effects, so I at once gave the following prescription.

Tehahydrobetanapthlolamine,
Thio paratolindine sulphate of soda,
Anhydrous orthosulphamido benzoic acid,
Amidolaceto paraphenetidine.
One teaspoonful every two hours.

On reading this prescription, the druggist fell dead. The patient, only so so, but there remains a disturbance of Broca's convolution, and he mutters a polysyllabic language that is unintelligible to a modern physician.

We have translated the above humorous hit at the rapidly growing tendency to mystify by pompous and high sounding names and in many instances to dress up in fantastic colors old and familiar remedies, and so deceive the unwary by sonorous scientific terms—so called. The same applies to much of the medical literature of the present day, and it is not uncommon to see columns of current journals running over with speculative theories that would puzzle a "Philadelphia lawyer" to decipher and reduce to intelligible thought and expression. Of late the germ theory of disease has given a special impetus in this direction, and seems to inspire its opponents and disbelievers with a frantic ejaculation of proscription and abuse, and to "sail in" and "lay about them" generally, whenever a germ approving head may dare to show itself. Another most prolific source of acute misery to these disbelievers of some of the most brilliant and wonderful discoveries ever achieved by progressive science, and who would still disbelieve "though one rose from the dead," is the antitoxine treatment of disease by inoculation. But how easy it would be, if one should take the trouble to investigate the extent and worth of their knowledge upon these subjects, to prove that they are infected not only with disbelief, but are enveloped in a cimmerian darkness of ignorance of what they never grow weary of trying to belittle and condemn. They not only fight against the cumulative evolutions of scientific thought and discovery that are filling every day and hour with inestimable treasures of good for man's benefit, but in the bitterness of their opposition to such marvelous revelations as illuminate the life of a Pasteur, they sullenly reject and disown all these with the words: "We will not have this man to reign over us." They remind one of the man who dreamed that he went to hell. We dare say our readers have all heard the story, but it's a good one, and applicable here, so we repeat it. When he reached Tartarus he became the recipient of infernal hospitality, such as is supposed to obtain in that locality, and was shown about by the presiding genius and "arbiter elegantiarum" of all, and the other delights supplied by his dominion, and then in popular favor. Among other objects of inquiry, there was one concerning which our dreamer was especially curious, and that was as to what accommodations there were for the various religious sects that had so long troubled earth with their mutual and irreconcilable malignity and hate, and had made a hell on the other side of the Styx. On sounding His Satanic Majesty upon this momentous question, and in which he laid particular stress upon the disposition that had been made of the sect known terrestrially as Presbyterians, "Oh," replied the Sulphurous Monarch, "come with me, and I'll show you how I solved that difficulty. Finding those fellows to be unruly and troublesome, and given to perpetual wrangling and dogmatic self-assertion, I have been compelled to adopt the plan of segregation from the rest of the community of my subjects, so that the peace of my kingdom should not be invaded, and that I might have the necessary leisure to pursue my unique function of diabolism tranquilly and uninterruptedly." So saying, he lifted up a cover or lid, and disclosed the mouth or aperture of a cavern, from which issued sounds of strife and disorder. "Listen," said he, "and you will soon be convinced of the necessity for their isolation." Sure enough, there they were at it, hammer and tongs, and not all the miseries and torments of hell itself had sufficed to burn out and consume the polemic bitterness of the *Christianity* in which they believed, and their interpretations of whose teachings and practices while on earth, had served as their credentials and acceptable passport to "the lake that burneth with fire and brimstone." Thus it is with our polemic doctor. He hugs his idols, forswears all innovations, contemns and spurns all the revelations of scientific research, and like the old time country doctor, thinks that when he has a good lot of colomel, castor oil, blue pill and Dover's powder, with a syringe or two for safety, in his saddle bags, he has got it all, and embodied within himself the entire art of medicine. He wants no advice from anybody, and believes himself to be the lineal descendant of the typical schoolmaster whom "poor old Noll" drew with his immortal pencil, and as he goes there is always humming in his ears:

"And still the wonder grew
That one small head could carry all he knew."

But let him stop and reflect that he'll be left behind in the race, and soon there'll be nothing left of him but a dissolving view, with perhaps a regretful memory among those who knew him of what might have been, could he have shaken off the old and threadbare garment of obstinate self-satisfaction and conceit, and consented to be taught by others who had forgotten, or laid aside as useless lumber, volumes more than he ever knew, or ever had the capacity to understand. The kismet, "It is given unto all men once to die," has been pronounced. Let him therefore remember that solemn fact, so that when the hour for the illustration of life's problem of mortality comes to *him*, he can shake off his "coil" contentedly, and drop out of life, feeling that he has drunk freely from all the overflowing fountains of knowledge, and gathered from every source "fruits meet for repentance," and so, the end!

JAMES A. CARMICHAEL.

New York, Jan. 20, 1896.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

ACADEMY OF MEDICINE.

Statistics of Hernia.—M Bertillon demonstrated the influence of luxurious living in the production of hernia. The statistics of the rich "arrondissement" of Paris, exhibit much less than those of the poorer localities. The occupations which predispose the most to hernia, are those of the brass and iron founders, maltsters, bakers and hatters; on the contrary, among those occupations in which the workers may sit, such as shoemakers, turners, clockmakers, etc., there are much fewer herniæ. Strangulated herniæ occur much more frequently among small boys than girls, and the age in which they are most rare is from five to fifteen years. After forty they increase rapidly with age.

M. De Valcourt reported the very good results, at the sanitarium of Cannes, from life in the open air, and sea bathing during the whole winter. It is true that at Cannes, the depression of the temperature below zero is rare, and is never prolonged beyond a few hours. Colds, infectious diseases, and rheumatism are very rare. The results in tuberculosis are more rapid in winter than in summer, and this fact, as respects phthisis, has been confirmed by the experience of many sanitaria.

M. Dubousqnet-Laborderie showed the influence exercised by local disinfection, and purification of the water at St. Ouen upon the mortality by typhoid fever. From twenty-three deaths in 1892, the mortality decreased to six in 1893, two in 1894 and one in 1895.

M. Berger read a report of four cases of tetanus communicated to the Academy by M. Le Roy Des Barres, of Saint Denis. M. Berger concludes that while admitting the prophylactic value of the injections of anti-tetanic serum, they have not succeeded, as a curative agent, in Paris, except in cases of chronic tetanus relatively mild. He insists upon the value of local treatment, and especially upon amputation, The last case presented by M. Des Barres was very demonstrative of the value of amputation.

Contagion by Books.—M. Du Cazal showed the possible transmission by books, of the streptococcus, the pneumococcus, and the bacilli of Loeffler, Eberth and Koch. The disinfection of books by the vapor of formaldehyde is less sure than their passage through the stove.

Vaccinal Immunity.—MM. Béclére, Chambon and Monod studied the immunizing action of the sanguineous serum of a vaccinated animal after dessication of the pustules. The action was rapid, almost immediate. It declared itself by the arrest of development of eruptive cancerous elements, and the attenuation of their virulence. The pustules remained rudimentary, abortive, and not inoculable.

Puncture and Incision of the Pericardium.—M. Delorme demonstrated that the accepted procedure of puncture in the fourth space, at six centimetres from the left side of the sternum, and again that in the fifth space, endangers the wounding of the pleura. He proposes, after repeated experiments upon the cadaver, a method which consists, after resection of two centimetres of the fifth and sixth costal cartilages, in removing the pleura from the point selected before puncturing the pericardium.

Annular Non-Cancerous Sclerosis of the Descending Colon.—M. Follet reported an observation of sclerosis, purely cicatricial, of the descending colon. He showed the success that would ensue, in these scleroses that had been diagnosed or revealed by an exploratory laparotomy from an enterectomy and a circular enteroraphy of the two ends of the intestine.

SURGICAL SOCIETY.

Elevation of Temperature After Hemorrhage of the Serous Membranes.—M. Delorme requested M. Quenu to explain why he believed in an elevation of the temperature after intra-peritoneal hemorrhage. M. Quenu had observed many cases of this kind in the service of M. Terrier. M. Reynier cited two observations of intra-pleural hemorrhage, with bacteriological examination, that were accompanied with elevation of the temperature, and continued to be aseptic, the same in hematocele and hemarthrosis; in the latter M. Quienu concurred. M. Puzzi observed considerable elevation of the temperature in many cases of hematocele, and attributed this phenomenon to the reabsorption of the blood, and the action of special toxines, the same applied to sanguineous effusions among the serous membranes, as noted in his general observations. M. Quenu insisted upon the rapid elevations of temperature, which could only be explained by reflex nervous action. M. Routier made a distinction between the rapid and the slow elevation of the temperature at the moment of the occurrence of the hemorrhage. M. Michaux was of opinion that there are effusions which are septic, and of which no cultures could be obtained. In all cases it is necessary to practically consider that every elevation of temperature should be regarded as an indication of septicity and requiring intervention. M. Lucas Championniere was of the same opinion as MM. Quenu and Routier. It all results from traumatic fever, which is different from septicemic fever, and traumatic fever really exists. The recommendation made by M. Michaux may produce real danger by practising useless interference.

M. Reynier: It is not at the moment of the occurrence of hemorrhage that the elevation of temperature is produced, but on the second or third day subsequently. When the blood escapes there is a depression of the temperature, and even though it be sterile, it may give rise to the elevation.

M. Quenu: All hemorrhages should not be confounded, but should be distinguished into the primitive and slow elevations.

M. Kirmisson: There are undoubtedly fevers without septicæmia—closed fractures, cerebral wounds, etc.

Pneumotomy.—M. Segoud cited five observations of pulmonary surgery. He insisted upon the service rendered by ausculation and percussion. In three cases of profound inter-lobor abscess, exploratory pulmonary puncture was very useful. M. Delorme returned to pneumothorax. There is no comparison between an accidental pneumo-thorax and that which results from surgical intervention, and hence he advises the fixation of the lung by two ligatures in the wound. M. Poirier had practiced pleuro-pulmonar fixation in a case of hydatid cyst by means of a suture put upon the two lips of the wound. There was no pneumo-thorax, and he considered that fixation was an excellent expedient.

M. Segoud recalled operations of the same kind made through the pleural cavity for hydatid cysts of the liver. M. Monod operated three times for pulmonary diseases, abscesses and gangrene, and he, too, insisted upon the great utility of auscultation and percussion. M. Terrier resumed some personal observations of pulmonary surgery. In two cases he had performed pneumotomy with the bistoury—cicatrization was very slow. There were hemorrhages and slight pneumonia; the pulmonary abscess was probably of hepatic origin.

M. Michaux presented a case of a woman who had been operated upon two years and a half previously for cancer of the uterus, by sacral hysterectomy. The operation was very laborious; he had successfully operated four times by the same method. M. Chaput exhibited an instrument for facilitating intestinal suturing, which he called "gouttiere anastomotique."

M. Pichevin: In a case of peritonitis supervening upon a vaginal hysterectomy, M. Pichevin performed laparotomy two days subseqently. He found general peritonitis, and a quantity of pus in the peritoneum—irrigation; cure. The peritoneal pus contained white staphylococci exclusively. The following are the experiences upon animals. 1st, the injection of peritoneal pus or of a pure culture of white staphylococci in boiling water, produced no peritonitis (Grawitz, Reichel, Orth, Waterhouse, Burjinsky). 2d. Injection of the staphylococci and of blood, caused a fatal peritonitis in fourteen days. 3d. If the peritoneum was scratched, or irritated with turpentine, the injection of staphylococci and blood killed the rabbit in five days. 4th. A slight peritoneal lesion, and not extensive, does not determine a fatal explosion of peritonitis, says Grawitz, if the peritoneal cavity is injected with blood and pathogenic microbes. 5th. Peritoneal lesions certainly favor the development of peritonitis, but they do not appear to be indispensable to the genesis of peritoneal infection. 6th. The peritoneum defends itself against the invasion of staphylococci better than the cellular tissues—abscess of the walls without peritonitis. 7th. The virulence of the staphylococci singularly increased by their successive passage under the skin of two guinea pigs and one rabbit. 8th. Injection of these staphylococci of very intense virulence produced peritoneal inflammation. 9th. Injection of blood and of the very virulent staphylococci into the peritoneum killed the animals in less than twenty hours; the peritonitis was intense four hours after the operation. These results confirm those of Burjinsky, and explain the differences with Grawitz and Pawlosky. The staphylococci of the peritoneal pus of our patient, when introduced, were harmless and disappeared. These same pathogenic germs, after several transmissions, produced a very manifest peritonitis. According to the opinion advanced by Bumm, post-operative peritonitis is contagious; it may be from staphylococci or streptococci exclusively or from multiple and various microbes. 10th. The gravity and rapidity of the infection and of death depend upon the preparation of the culture, the extent of the peritoneal lesions, and especially upon the degree of the virulence of the pathogenic germs. Staphylococci, according to their virulence, can kill animals in fourteen days, in five days and in less than twenty hours.

After having studied the symptomatology of post-operative peritoneal septicæmia, M. Pichevin concludes that peritoneal irrigation is the supreme resource. It should be done rapidly, and twenty litres of salt water or boric water should be thrown into the peritoneum.

M. Porak curetted a woman attacked with puerperal peritonitis, consecutive upon the retention of a fetid placenta. From the first day of the abortion, culture of the blood revealed the presence of a large number of streptococci. This seemed to him a contra-indication against laparatomy and irrigation. The patient succumbed.

Action of Leucocytes; Phagocytosis (from the *Clinique Francaise*).—Before Metchnikoff, the role played by the lymph was not determined. It was he who first studied its composition, and fixed the relations of the white globule to the microbes. We know that the transparent or pale yellow lymph, is milky or whitish when it returns from the intestine. It is the chyle seen in circulation when an animal is killed two or three hours after eating. This lymph circulates in the lymphatic vessels, traverses the glands, where it becomes charged with white globules, and finally commingles with the venous blood. It exists in very large quantity in the organism. Sappey estimates it at one-half of the arterial system. As to its composition, it is very interesting, and the microscope easily reveals it. White globules are seen, appearing like small masses, non-nucleated corpuscles, contractile, changing their form, and possessed with the property of absorbing small solid bodies. Another curious fact, that they are much more numerous after their passage through the glands, and are found in large numbers around an inflamed point. They are enveloped in a *plasma*, which presents characters analogous to those of the blood plasma, coagulating spontaneously, and forming a fibrinous reticulum which imprisons the white globules. The serum is analogous to the serum of the red blood, with alkali-albumines and serine entering into its composition. The following is, according to Hensen and Dahnhardt, a comparative analysis of the blood and the lymph.

	Blood plasma.	Lymph.
Water....................	902	86.34
Fibrine..................	4 05	1.07
Other albuminoids.........	78.84	2.30
Extractive matter (urea)...	5.66	1.31
Mineral salts..............	8.55	8.78

These may increase or diminish from certain causes. Muscular activity, sanguineous pressure and venous obstruction augment them. Vaso-dilatation and certain therapeutic agents—for example, curare—have an identical action. It may also be remarked that diet augments the proportion of albumen and diminishes the water, and that, after traversing the glands, the leucocytes and fibrine are much richer and in larger numbers.

These glands have, moreover, the property of arresting virus and fine particles of charbon (anthracosis). The utility of the lymph is indisputable; it serves to restore to the blood the formed transudations, the elements charged with nourishing the tissues. It establishes a current from the organs to the venous system, while the chyle carries to the blood the assimilable products of digestion received in the intestine. In fine, it is the role played by the white globules, the study of which has been illuminated by Metchnikoff; it is phagocytosis.

These globules are, because of the movements with which they are endowed, veritable migratory cells, and by their properties of absorption, they consume the small corpuscles, the microbes which they encounter, and relieve the organism of them. They also appropriate the debris of the red globules, the pigmentary granulations, and attack the microbes that have penetrated into the tissues. They absorb them, digest them, or carry them to the glands. Such is *phagocytosis*—the original conception due to Metchnikoff.

By the side of this action should be placed that of antiseptics, which aid in supplying the phagocytes. It is useless to add anything further to the value of antisepsis. No one who understands can fail to admit this; it simply remains as to the choice of the antiseptic. An active and non-toxic antiseptic, such is the point to which tend all the efforts of operators. These qualities we believe to reside in the "coal tar saponine of Le Boeuf." This agent is in the form of an emulsion of saponine, which makes it suitable for cleansing wounds more thoroughly than any other chemical agent, and allows of its employment in water in any quantity, according to the use desired. We have never seen any accidents following the dressings made with "coal tar saponine," and we remember that M. Le Boeuf, with Dr. Jules Lemaire, were the first to apply this method to the dressing of wounds, and of creating, before Lister, the antiseptic process. For instruments, "coal tar saponine" pure. For operations, with the addition of 2 or 3 parts of water; for dressings, solutions of one-quarter, one tenth.

Asystole Treatment.—By asystole is understood an obstruction of the circulation, whose cause consists of feebleness of the contractions of the heart. Beau was the first to study and describe this particular condition of myocardia. The appearance of a patient suffering from asystole is characteristic. He pants for breath, and seems to suffer great anguish, face purple and covered with sweat, eyes haggard. This affection, that causes such disturbance in the two circulations, is characterized by depression of tension of the arterial system, and augmentation of the same in the venous system. Infiltration of the serous membranes—œdema—is the most prominent system. As respects the lungs, there are symptoms of great dyspnœa, of pulmonary apoplexy, with tendency to suffocation, and probably effusion into the pleura. The abdominal viscera are equally involved, with ascites often very abundant, liver congested, frequently painful, extending below the false ribs, with hepatic pulsation, and an icteric hue of the complexion. The spleen is sometimes enlarged, with frequent digestive troubles—diarrhœa, intestinal hemorrhages, vomiting, nausea, etc. The kidneys, too, are not spared; analysis often reveals traces of albumen. On cooling, the urine gives a red precipitate, and sediment full of uric acid and urates. The nervous system also participates in the asystolic troubles, with cephalalgia, mental confusion, vertigo, etc. There are the phenomena of dilatation of the heart, apex depressed, with the area of dullness increased, auscultation yields dull sounds, tumultuous, with no special characteristics. According to Parrot, a gentle souffle ("souffle asystolique" may be heard at the zyphoid appendix; pulse small and intermittent. A number of affections may spring from asystole, viz., valvular diseases among the first, described by Beau under the name of the "coeur force"—the forced heart—the condition of that organ being as though oppressed by violent exertion and fatigue, and which make up the majority of cases of asystole. Diseases of the lungs, which obstruct the capillary circulation; viz, emphysema, sclerosis, asthma, whooping cough, croup, may be productive of arterio-sclerosis, and aneurism of the aorta, and as respects the urinary apparatus, may provoke certain forms of nephritis, and biliary lithiasis. There are also asystolic conditions having reflex points of departure, viz., utero-ovarian, for example, and others of nervous origin, Basedow's disease and certain operations. It is very difficult to explain a symptom like asystole, that is due to so many and various diseases. Easy to understand, however, that a myocardia can produce disorder of the general circulation, diseases of the lungs producing hematosis, and, in the lesser circulation inducing hypertrophy of the right side of the heart, terminating in asystoly. But one is forced to admit a reflex action in cases of asystoly due to biliary lithiasis, for example, or certain affections of the stomach—Potain—and more reasonably still, nervous maladies. Whatever may be the disease that engenders asystole, the cause is vaso-motor, with an augmentation of pulmonary vascular tension, whether due to the pneumogastric—Potain—or the great sympathetic—Frank Arloing. The treatment should be addressed to the cause that modifies the blood-tension. A tonic should be given to the heart, which will restore its energy and help it to overcome the obstacle that has caused its hypertrophy. Most important of all is rest, with the absolute observance of a milk diet; soothing drinks, may be permitted, either sweetened or with milk. Next, a choice must be made of a cardiovascular remedy. Digitalis is excellent, but its action should be carefully watched. Preference may be given to the granules of chloroformic digitaline—one milligramme granules of Berthiot, which are of irreproachable dosage. Strophanthus, sparteine, convallamarine and caffeine may be tried; but superior to all are the preparations of the kola nut, which, as we know, contain caffeine, theobromine, and the red extract of the kola, this last alkaloid having an action superior to that of caffeine.

Prof. Dujardin-Beaumetz says: "One of my pupils—Dr. Mounet—has devoted his inaugural thesis to the study of kola. He has thrown light upon the tonic properties of this remedy, and its happy effects in the cure of cardiac affections, and new experiments, recently made by Prof. G. See, have confirmed the facts previously established by us." The kola should be given in asystole, particularly the fresh nut, which acts more effectively, and in smaller quantity. The granulated "Kola Henry," with the fresh nuts of the kola, seems then to be the remedy of choice because of its richness in alkaloids. Give the "Kola Henry" in the dose of five to six teaspoonfuls (such containing three grammes of the fresh kola) in a little water or sweetened drink, on eating, to those patients to whom a slight meal may be permitted.

THERAPEUTIC SOCIETY.

Arecoline and the Arec Nut.—M. Monquet endeavored to substitute in veterinary practice in the treatment of indigestion, the bromhydrate of arecoline, combined with injections of the sulphate of eserine and the nitrate of pilocarpine. Employed in the horse in the dose of 0 gr., 02, the bromhydrate of arecoline produced copious salivation and defecation, without diarrhœa.

M. Weber has employed the arec nut in the dog as a vermifuge, dose 2 to 4 grammes. He is astonished that this excellent vermifuge is not used in human therapeutics.

M. Bardet said that the arec nut is used for chewing. In England and Germany it is administered as a vermifuge; it may be servicable in obstinate constipation. The arecoline, the extract, is very poisonous; the dose for a man should be less than a milligramme.

M. Monquet remarked that arecoline should not be confounded with arecäine, another product of the arec nut, and analogous to muscarine.

M. Ponchet thought that before the introduction of arecoline into human therapeutics, it should be experimented with at length, and the dose definitely fixed, because this very active substance causes cardiac troubles.

Treatment of Grippal Pneumonia with Philocarpine.—M. Bardet read a report by M. Poulet, who had treated an epidemic of grip with pulmonary manifestations. The pneumoniæ, when treated with pilocarpine, dose 0 gr. 10, for two days, were cured in a large proportion. One hundred and eight cases were observed, with no succeeding accidents.

M. Ferrand feared that the employment of pilocarpine, in pneumonia, might determine cardiac collapse.

The Stomach of the Count de Chambord.—The *Freindenblatt*, of Vienna, publishes the following item:

When the autopsy of the Count de Chambord was made at Frohsdorf in 1833 with all the formalities required by law, Professor Kundrat recognized immediately on opening the stomach, that the Count had died from a cancerons abscess, about two centimetres in size, and which had formed at the cardiac orifice.

Always desirous of multiplying the precious objects—from a scientific point of view—of the Museum of Anatomy and Pathology of the University of Vienna, Prof. Kundrat, in his scientific zeal, made no scruple of cutting off this part of the stomach and taking it to the museum, where it was preserved in a jar filled with alcohol, and distinguished by a label written by the Professor's own hand, so that every visitor to the museum could examine it without difficulty, and every physician could be satisfied that he was in the presence of a typical case of carcinoma.

The Duke of Parma, one of the heirs of the Count de Chambord, having learned through the journals of the presence of this object at Vienna, dispatched M. Ferdinand d'Obry, an old employe of the Count, to Prof. Drasche. During last August negotiations were instituted with the Institute of Anatomy and Pathology, which rapidly culminated. M. d'Obry, after having informed the chief of sanitary service of the city, and, having submitted a "procès verbal" of the affair, received in a casket of silver the last remains of "The Child of France," and transported them to Castagnovizza, where they were deposited, according to the *Corriere de Gorizia*, in the sarcophagus of the Count de Chambord.

A Lake of Blood.—For some weeks the surface of Lake Morat, in Switzerland, has been colored red. This phenomenon often occurs, and the old fishermen call it "The blood of the Burgundians," in memory of the soldiers of the Téméraire, who met their death in the waters of the lake. This coloration of the water is due to the presence of an aquatic herb—"oscillatoria rubescens"—described by Italler, in 768, and by Candolle before the Society of Naturalists of Switzerland in 1825. In his monograph of the 'oscellariæ"—Paris, 1893—Gomont cites the Lake of Morat as the only locality of this little plant.

MEDICAL SOCIETY OF THE HOSPITALS.

M. Gaucher reported four instances of patients poisoned by the external use of the sub-nitrate of bismuth. Three of them were attacked with ulceration of the leg; the fourth, a woman, burned in different parts of the body. They were dressed each day with the sub-nitrate. The first signs of poisoning appeared on the borders of the gums, more marked than in lead poisoning, and tattooed patches on the cheeks. If the use of the remedy was continued, a stomatitis soon supervened, followed by secondary infection. On disuse of the bismuth, the effects rapidly disappeared, so putting the origin of the poisoning beyond a doubt. M. Hayem, who employed the sub-nitrate of bismuth internally in the large doses of 15 to 20 grammes, had never met with accidents of the kind mentioned, and it gives reason to suppose that when applied to the integument, the remedy undergoes a peculiar modification, which does not exist when brought in contact with the gastric juice. M. Chauffard said that the treatment for ulcers of the leg, which had been most successful with him, was a dressing with powdered sugar, covered by gum taffetas. M. Siredey has employed a powder of the sub-carbonate of iron, with very good results.

The Mortality of Diphtheria Since the Use of Serum.—On summing up the mortality by diphtheria in 108 cities of France, whose population exceeded 20,000, M. H. Monod shows that the mean statistical record of deaths by diphtheria during the first half of the years from 1888 to 1894 was 2,627 deaths, while during the first half of 1895 there were only 904 deaths, a diminution of 65.6 per cent. If it be considered that diphtheria is more frequent in the country than in the cities, the valuation may be reckoned of nearly 15,000 lives annually preserved.

M. Mathieu communicated the case of a man who had absorbed 1,600 grammes of the sub-nitrate of bismuth in eighty days, twenty grammes daily, without producing any deleterious effect upon his general condition. This long administration of the drug was made involuntary during a vacation, and the treatment prescribed by M. Mathieu before the departure of the patient, was kept up until his return. It was interesting from two points of view, that of the harmlessness of bismuth when taken into the stomach, and the nullity of its action upon the gastric juice. M. Hayem: These are good reasons why it should be preferred to the bicarbonate of soda, whose action may be hurtful if administered in improper doses. M. Felix Ramond presented sections of fragmentary dissociation of myocardia in a case of "coeur force"—overstrained heart

The patient, a professional runner, was taken with exhaustion and faintness in consequence of a forced march of about 30 kilometres. There was complete anæmia, and he died six hours after. The heart showed unmistakable lesions of segmentary dissociation. It seemed that the patient had succumbed to a sub-acute auto-poisoning, and that the toxines had played the same role as those of dothin-enteritis or of variola, the important factors of segmentary dissociation. M. Hanot reported an observation of osteomalacia of pregnancy, the cause of which was a lobulated epithelioma of the bones and of the liver. In 1874, he saw another case, due to general syphilitic lesions of the osseous system, and thus it may be seen that osteomalacia is associated with a variable pathogenesis. M. Widal observed a curious case in a woman seven years after her last pregnancy, in whom there was no trace of syphilis. The microbic appearances were also negative. M. Huchard showed specimens taken from a woman stricken with sudden death during a mitral retraction. Because of three prominent symptoms, dyspnœa, excessive dilatation of the left auricle and arythmia, there was reason to regard it as a case of cardiac thrombosis. The autopsy revealed a clot in the left auricle which obstructed the very contracted auricular orifice. M. Hayem: The clot was made up of a hematoblastic mass, and was of the type called clots, "par battage." M. Comtz: Sublingual ulceration and diphtheroid subglossitis, independent of whooping cough. From his observations M. Comtz concludes that there exist two kinds of lesions of the frenum linguæ, independently of whooping cough. (1) A sublingual ulceration resembling that of whooping cough, supervening in children that cough or have coughed without the spasms of coughing of the disease. (2) A diphtheroid subglossitis, or papillomatous, called the malady of Riga, which is met with in children who do not cough, but incessantly push the tongue out of the mouth and thus cause chronic irritation of the mucous membrane of the frenum. In both cases the lesion is of slight gravity, and is cured spontaneously, or by simple means. J. A. C.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Common Salt as a Remedy for Ringworm.—F. J. Reilly, M. R. C. S., states in the *British Medical Journal* for November 23d that he has used common salt as a remedy for ringworm for the past seven years. Children who are suffering from tinea tonsuraus are sent to the seaside, and almost invariably improve in the salt air. This fact arrested his attention, and led him to think that common salt might prove a valuable remedy in ringworm. Accordingly, he prepared a solution and used it in the next three cases which he was called upon to treat, applying it to the diseased scalp every night for five nights and washing it off the following morning with 10 per cent. boric acid soap. In less than four weeks a cure was effected in each case.

Myrtil: A Rapid Cure for All Eczemata.—It is well-known (*N. Y. Therap. Rev.*) that Winternitz strongly advocates the use of a decoction of myrtil (bilberry), which has yielded him excellent results in the treatment of affections of the lingula mucosa of the most obstinate nature, such as fissures following the course of phthisis, and other cachectic conditions. It has also been of service in blenorrhagia and certain leucorrhœas. Dr. Winternitz, taking into consideration the fact that a very concentrated decoction of myrtil colors deeply not only the epithelium, but also the papillary layer of the skin, at the same time furnishing it with a non-irritant covering, concluded to try it in cutaneous diseases, where, as experience has taught us, all fatty and irritating substances only increase the evil.

The first case treated was a moist eczema of the face, which had persisted for weeks, despite treatment by eminent specialists. From the very first day of the treatment of the case by the decoction of myrtil, the subjective symptoms were lessened, and in a few days a complete cure was effected. The author has also found it efficacious in several cases of squamous eczema of some years' duration, one case of seborrheal eczema, two of mycotic eczema, in from four to six applications; three cases of anal eczema, and one of lichen urticans. In a case of a burn of the second degree, with the formation of vesicles and loss of epidermis, the preparation quickly relieved the patient's sufferings, and the new epidermis was formed in a short time under the protective covering afforded by the myrtil. Also, a rapid cure with cicatrization of an ulcer of the leg. Encouraged by these results, Dr. Winternitz began to treat all varieties of eczema with myrtil.

He gives the following directions for making a durable preparation:

The dried berries are placed in water over a slow fire. They are allowed to boil until all the coloring matter is extracted. The juice is separated by straining through a very fine sieve. It is then boiled down to a syrupy consistency. While boiling, add one to two grammes of salicylic acid, dissolved in warm water, for every litre of the fluid. If a very adhesive preparation is required, myrrh can be used instead of the salicylic acid, in indifferent quantities. This decoction is to be painted upon the skin with a brush, and the part covered with a thin layer of cotton, and over this a bandage. In a moist eczema of the face the discolored skin can be dusted with rice powder.

Treatment of Diabetes by Yeast.—Dr. M. E. Cassaert (*Bull. Med.*, Sept. 25, 1895), has obtained excellent results from the administration of yeast in daily doses of fifty grammes, with the principal meals, to three diabetic patients, two males and one female; although its use was not sufficiently prolonged owing to the difficulty in preventing the acid fermentation, or putrifaction of the yeast, during the summer. The treatment produced, soon after absorption, large quantities of gas, which was eliminated by eructation, and was followed, in the course of one or two days, by a very offensive diarrhœa. After a few days, however, toleration was established.

The author says, in summing up, that whether the patients are fat or lean, or even phthisical, the yeast causes the pains to disappear; it increases the strength and the weight, improves the general condition and diminishes the amount of sugar.

If we consider the increase in weight alone it is sufficient to prove the efficacy of the treatment, so difficult is it to maintain, and, above all, to augment the weight of a diabetic patient with a marked cachexia.

The mode of action of the yeast is not yet determined, but further research will doubtless solve this problem.

Removal of Foreign Bodies from the Throat.—The *Medical Times* says: "The difficulty of removing fish bones and similar obstructions impacted at the lower end of the æsophagus is well-known, and various mechanical measures and appliances have been invented to deal with the difficulty. One of the most simple, however, and, as reported, one of the most effectual, remedies in the case of impaction of such foreign bodies is to administer to the patient a pint of milk, and forty minutes afterwards an emetic of sulphate of zinc. The fluid easily passes the obstruction, and is, of course, rapidly coagulated in the stomach into a more or less solid mass, which, on being ejected, forces the obstruction before it, and so effects its removal."

Cautery by the Sun-Glass.—Dr. Shepherd (*Yale Med. Journ.*) recommends the use of the sun-glass for the removal of growths where it is especially desirable to avoid the formation of a scar. He applies cocaine to the surface, and then focuses the rays of the sun on it through a suitable lens.

Treatment of Insomnia Due to Hypersensitiveness to Noise.—Many persons are easily awakened by the slightest noise, and some who are continuously exposed to noises during the night are apt to develop persistent insomnia. Stopping up the ears with absorbent cotton does not ordinarily improve matters much, because dry cotton allows the sound waves to pass through its interstices. In such cases Dr. Rosenbach (*Med. Week*) has found that if the cotton is first steeped in petrolatum, a plug is obtained which prevents completely the perception of noises of all kinds. It is self-evident that this method of treatment only protects the patient from the perception of sounds, but does not prevent him from feeling the mechanical vibration accompanying a loud noise.

Honey in Erysipelas.—Dr. C. E. Hayward, of Cropsey, Ill., writes to the *Med. Record*: "Several years ago, while treating some bad cases of erysipelas, a lady asked me why I did not use the remedy they used in Montana. I asked her what that was. She said, 'honey.' I did use it and found it very effective, and since then have used it in every case of erysipelas on any part of the body. My first treatment is the external application of honey. I shave the head and face if necessary, spread the honey thickly on cloth, cut holes for the eyes if the face is the part affected, and change the application every three or four hours. I have never had it fail to relieve the pain, swelling and nausea, and to shorten very much the attack. I also give internally the usual remedies for reducing the fever and stimulating the emunctories. Three or four days usually suffice to bring about convalescence under this treatment. I could report numerous cases, but would rather every physician should give it a trial, and I am sure he would find a practical addition to his armamentarium."

RETROSPECTIVE DIETETICS.

In a Paper entitled "Infant Feeding—A Review" (*Pediatrics*, Vol. I, No. 1; Jan., 1896), Dr. A. Jacobi compares some of the methods proposed by himself during the past thirty-five years with the latest results of German research in this department, and concludes substantially as follows:

1. As to sterilization: "Cow's milk is not woman's milk. It is not identical with it. Sterilization does not change its character. It merely obviates such dangers as result from the presence of pathogenic germs and from premature acidulation. The substitution of cow's milk, or of sterilized milk, for woman's milk as the *exclusive infant food* is a mistake. Experience teaches that digestive disorders, such as constipation or diarrhœa, and constitutional derangements, such as rachitis, are frequently produced by its persistent use, and it appears to be more than an occasional (at least co-operative) cause of scurvy."

2. A leading authority, the Berlin physician, Heubner, is quoted as recommending—partly on the basis of "Jacobi's Practical Experience"—in intestinal diseases of the very young, the simplest flours, mainly of rice and oats (which have a finer microscopical structure than wheat). Norbert Auerbach, too, agrees with the writer in advocating larger percentages of water in infant feeding than the customary ones. His mixtures for the first and second months of life are three parts of water and one of milk; for the third and fourth, two and one; for the fifth and sixth, one and one; for the seventh and eighth, one and two. Both he and A. Seibert advise filtering milk before sterilization.

3. Dr. Rotch's plan of establishing milk laboratories is highly approved of, as, in this way, by the use of the separator—the milk sugar and the albuminoids, also the mineral matter of the milk being fairly well-known—the food of the child can be modified according to age, and to changed conditions of health. Jacobi, however, on the ground of his experience, takes some exception to the broad statement of this author that "human beings in the first twelve months of life are carnivora. An animal food entirely and always free from any vegetable constituents, has been proved to be the nutriment on which the greatest number of human beings live and the least number die." He adds: "It is to be deplored that, for the present, Dr. Rotch's method is only for the rich; mine [of cereal admixture] has the advantage of being one for the people, both rich and poor."

Like Prof. Rotch, Prof. G. Gaertner, of Gratz, employs the centrifuge for the purpose (as described on another page) of obtaining a milk resembling that of woman. The difference between Gaertner's and Rotch's methods is this, that the former is applicable to the large majority (but that only) of infants who require cow's milk appropriately prepared, and that the latter permits of all sorts of changes and percentages, and of adaptations to the requirements of both the well and the sick, according to the opinions and intentions of the physician in every individual case.

Diet in Diabetes.—For a long time there has been a growing sentiment throughout Germany that diabetes has not been properly treated (*Nat. Med. Rev.*) Hirschfeld says he believes that diabetic coma is favored by the exclusion of carbohydrates in the diet. Schmitz allows his diabetic patients a small quantity of albumen, while he orders the free use of food containing starch and fat in large amount. Grube impregnates the system with carbohydrates. Williamston, of Manchester, says that home-made bread is much better than specially prepared diabetic bread. A number of American physicians are following out this line of treatment with better results than they have had heretofore.

Preparation of Milk for Infants' Food.—Gaertner (*Lancet*) has recently taken advantage of the action of the centrifugal separator to retain in a diluted milk the full percentage of the fat. Fifty litres of fresh milk and the same of water are poured into the separator, which is made to revolve at such a rate that the two outgoing streams shall be equal. The separation of the fat is thus incomplete, and a large proportion of the watery solution passes out with it: the percentage of casein and of fat being in the original milk, say, 3.6 and 3.5, in the diluted 1.8 and 1 75, and in the cream and separated, or, rather, in the rich and poor milks, respectively, 1 8 and 3 3 and 1 8 and 0 2. In good nursing mother's milk the percentages are, according to Pfeiffer of Wiesbaden, 1.7 and 3 1. If, then, milk-sugar be added in the proportion of 35 grammes to the liter, the composition becomes identical with the very richest human milk. An incidental advantage accruing from the centrifugal rotation is that the rich milk is completely freed from the suspended particles of dung, dust, etc., which, in virtue of their greater specific gravity, gather round the sides of the drum, forming a scum, which is fatal to young pigs. These particles are the chief vehicles of the microbes which set up putrefactive changes in a fluid which, though unstable, is absolutely germ-free and aseptic as it issues from the breast or udder, and to this difference many of the evils of artificial feeding are doubtless due. Gaertner's, if not actually sterile, is more easily sterilized than other milk.

Diet in Pregnancy.—Dr. Eichholz, of Kreuznach, in the *British Medical Journal*, maintains that a large proportion of the discomforts and difficulties preceding, attending and following parturition might be avoided by a rigid adherence to some simple dietetic rules. Excess of albumen and of water are, he considers, the errors against which pregnant women should be warned, as tending respectively to excessive development of the fetus and secretion of amniotic fluid. His rules are: Meat only once a day, and that in small quantity and rarely if ever salted; green vegetables, salad, potatoes, bread and butter, but avoiding as far as possible, eggs, peas and beans, as being too rich in albumen. Thirst to be quenched by milk or water in moderate quantities, and cocoa in preference to tea and coffee. Wine, beer and spirits to be forbidden, and drink of any kind, unless in case of urgent thirst; but fruit, raw or cooked, to be indulged in *ad libitum*. The general result of such a diet he found to be a remarkable feeling of well-being; the sense of fullness, bearing down and weariness, thirst and constipation soon disappeared, and the patients have been able to walk many miles, up to the eve of confinement. His own wife would leap ditches and climb hills, and even on one occasion ventured on a race for endurance. The ease and rapidity of the deliveries in some twenty-five consecutive cases, some of whom had previously had tedious or difficult labors, the small amount of liquor amnii, often not more than a teacupful and sometimes almost inappreciable, were striking, and all without exception succeeded in nursing their infants, though some had not been able to do so before. The children were healthy but small, mostly weighing six pounds, and the circumference of the head was under 36 cm. (14 inches), averaging 33 to 34. The restriction of albuminous food had no injurious effect on the quantity or quality of the milk.

Small Quantity of Iron in Milk.—Prof. Huebner says he has noticed, as a result of long years of clinical experience, that anæmic children do not prosper on a prolonged milk diet (*Pract. Med.*). The explanation of this was made very clear at the April meeting of the German Congress of Internal Medicine by a paper presented by Prof. E. Bunge, the famous physiologist of Switzerland. Prof. Bunge showed that milk was especially deficient in iron, while wheat contained nearly three times the quantity. The force of this statement was made clear when Prof. Bunge declared that the organic compounds of iron are not assimilated by the system, assimilation requiring that the iron be in the form found in our various foods. Therefore, it appears that our prescriptions of the various preparations of iron are practically worthless. We should rather supply those foods which are generously supplied with this product. An exclusive diet of milk for children cannot be regarded as the best practice in the light of these investigations. But when preparations composed of wheat or other cereals richly supplied with iron are added to cow's milk, then this deficiency is supplied in precisely the manner required. In cases of anæmic children, chlorosis, wasting diseases, etc., such food should be added to cow's milk, when, according to Prof. Bunge, milk will be restored to its old place as a perfect food.

OBITUARY.

Occasionally in our earthly pilgrimage we are brought under the influence of some subtle force, embodied in a human form, which touches every heart and influences every soul with which it is brought in contact as with a perpetual benediction; such was the Hon. James G. Graham, who, just as the sun was passing its meridian on the 16th of January, passed from his mortal to his immortal life. Every year of that life, numbering but seventy-five years, is full of memories of work well accomplished, of duties well performed. As one after another passed before the casket to take a last look at the face which had always beamed with kindness and sincerity, death, with softening touch, seemed to have erased every line of care, and brought out in radiant beauty and sweetness the impress of of a soul always young, always pure and strong. Vibrating in the air, like sweetest music, could almost be heard the summons, Come up higher and enter upon that life for which the one just passed has been such a fitting preparation. To him death had no sting. It was the golden gateway through which he passed from time to eternity, from mortal to immortal life.

Our memory of Mr. Graham is closely associated with the twenty years during which we were co-trustees in the Middletown State Insane Hospital. Members of the same committee, during all that twenty years when the institution was developing from infancy to maturity, we were brought into more than usual close companionship. To no one of the earnest, unselfish band of workers who composed the Board of Trustees has the institution been more indebted than to James G. Graham, and much of its success is due to his watchful eye, his wise counsels, his excellent judgment, and that spirit of harmony which he infused among all his co-workers. The clearness with which he presented his views, and the respectful deference for the opinions of his colleagues won for him the respect of all.

His ready wit, his wide familiarity with every department of literature and science, his grace of diction, his genial, honest, unselfish nature, endeared him to every circle in public and private life. No richer legacy could be left to family and friends than the memory of a life, every hour of which breathed a spirit of good will to all, and no prouder monument than the institutions he fostered and the love of all who knew him.

MISCELLANY.

—The conjoint testimony of several physicians seems to show that the left-sided position is beneficial in all kinds of convulsions.

—For the removal of small filiform warts situated upon the face, Dr. Comtrell uses scissors and then touches the base with lactic acid.

—A Leidy Memorial Fellowship in Anatomy is proposed in the University of Pennsylvania. For further information address Dr. J. Howe Adams, Secretary, etc.

—Eryngium aquaticum, the tincture, in five drop doses three times a day, says a writer in the *Medical Century* is a wonderful relief bringer in renal colic.

—Dr. E. H. Graudin has been elected a Vice-President of the Academy of Medicine. The report of the Treasurer of the Academy shows the finances to be in a flourishing condition.

—Dr. Lusk's "Midwifery" is to receive the exceptional honor of an official translation into Arabic for the use of the medical students and midwives of the School of Medicine, at Cairo, Egypt.

—A German statistician, Bernhard Omstein, has computed that Greece stands in the first rank among European countries in the number of centenarians. He attributes this to the climate.

—The law concerning alcoholic and narcotic habitues in the State of Connecticut permits such patients to voluntarily commit themselves for one year to any institution established by the laws of the State.

—The *Bulletin of Pharmacy*, June, 1895, says that, in Japan, massage is performed almost exclusively by the blind. Russia has also a large number of blind masseurs. Their delicate sense of touch is said to qualify them admirably for the work.

—Dr. Gowas says in cerebral hemorrhage the onset is sudden and the consciousness lost; in cerebral embolism, onset not quite so sudden, consciousness not lost; thrombosis, onset more gradual, consciousness not lost, attacks preceded by headache.

—The Emperor of Germany announces that he will contribute 10,000 marks toward the erection of a statue in Berlin to Helmholtz's memory. This, the *American Lancet* thinks, is the first contribution by royalty or any distinguished functionary of state to commemorate the achievements of either doctor or scientist.

—Dr. J. D. Mitchell (*Southern Jour. of Hom.*) says that staphysagria, in low or high dilution, will alleviate pains from incised wounds in almost every case, whether from accident or after operations. "It is especially indicated after abdominal incisions, where patient complains of the sharp biting pains we have all heard of so often."

—"What are you doing?" Dr. Holmes once asked a student in the dissecting room. "Ligating arteries, sir." "Why not say tie?" rejoined the doctor. "I find that country practitioners ligate the arteries and that surgeons tie them." The best of this anecdote is that the unappreciative student spread it as a joke against Dr. Holmes.

—Do not be afraid to use chloroform all through the period of labor. The heart of the woman at full term is peculiarly adapted to stand it, and extreme pain produces nerve exhaustion, prevents proper recuperation, damages the quality of the milk, retards the removal of debris from the pelvis, and produces susceptibility to disease germs.

—All living liquids, blood, lymph, milk, etc., have the same freezing point—57° C., M. J. Winter tells the Academie des Sciences. Consequently, it is an easy matter to detect whether milk has been watered, as the freezing point of water is 0°, and the freezing test detects as small an adulteration as one part of water to nine parts of pure milk.

—The World's Congress of Medico-Climatology will hold a National Conventon in San Antonio, Texas, Feb. 20th, 21st and 22d next, and we are requested to extend an invitation to our readers to be present. The lowest possible rate of transportation will be obtained, and a hearty welcome is assured. For further information address Dr. W S. Rowley, San Antonio, Texas.

—Dr. Frederick R. Percy, in a paper presented to the Section of Materia Medica of the American Institute of Homœopathy, at Newport, says: "I know a physician who assured me that for one year after giving up the highest dilutions he gave absolutely no medicine, and with no ill results to his patients. In the year following he gave remedies only when most imperatively indicated."

—That bank notes absorb harmful matter has been proved by the experience of a bank clerk in Vienna quite recently. The man in question had to count a large number of notes, and as is commonly done, in order to turn them over more speedily he wetted his fingers. He rapidly experienced pain on his lips, a tumor ensued, and in spite of an operation he succumbed from the effects of the poison absorbed.

—It is not generally known, says the *Charlotte Med. Journal*, that in France it is forbidden, under severe penalties, for any one to give infants under one year any form of solid food, unless such be ordered by written prescription, signed by a legally qualified medical man. Nurses are also forbidden to use, in the rearing of infants confided to their care, at any time or under any pretext whatever, any nursing bottle provided with a rubber tube.

—It would almost seem that to be a physician was incompatible with public honors and recognition; either the profession or the services have to be ignored (*Am. Jour. of Insanity*). Dr. Rush was a signer of the Declaration of Independence, but how many of us are aware of the actual number of medical men whose names are with his on that document? Yet, at a time when skilled physicians were rarities, and when not a single medical school was in practical operation, nearly 10 per cent. of the first representative body of our country was drawn from our profession.

—The curtain had risen on the third act, and the momentary hush that preceded the resumption of the performance on the stage was broken by a stentorian voice from the rear of the auditorium: "Is Dr. Higginspiker in the house?" A tall, heavily-whiskered man, occupying a front seat, rose up, "If Dr. Higginspiker is in the house," resumed the stentorian voice, "he told me I was to come here and call him out at 10 o'clock!" Whereupon Dr. Higginspiker, looking very red, picked up his hat and cane and walked down the aisle amid loud and enthusiastic applause.

—An epidemic of the dancing sickness is reported to have broken out last summer among the school-children of Rehlingen, a village in Germany. It was started one day during a violent thunder-storm, while the children were all in school, by a girl twelve years old, who was immediately imitated by others, and before long forty of the scholars were dancing hysterically around the room. This was kept up for an hour or two, and was repeated the following day at about the same hour. The schools were then closed for three weeks, in order to get the children into a normal state.

—The Weber prize, founded by Dr. H. Weber, of this country, in memory of Dr. E. A. Parkes, will be awarded every three years for the best essay upon some branch of the subject of tuberculosis, especially with reference to pulmonary consumption in man. The value is $750. The first award will be in 1897, and the subject selected by the adjudicators is the means, prophylatic or curative, deemed by the author to have value in the control of tuberculosis, especial regard being had to their application to human tuberculosis. The competition is open to medical men of all countries. The essays must be sent in to the Royal College of Physicians, London, and Dr. E. Liveing will reply to all questions on the subject.

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ORIGINAL ARTICLES.

THE CATHODE RAYS OF CLAIRVOYANCE.

By Egbert Guernsey, M. D.

IN the quiet of his laboratory, in Wurzburg University, a young man not over forty years of age has recently startled the world by the discovery of a process by means of which light generated in a vacuum tube by the rapid vibration of electricity passing through it, caused by the action of the electric fluid in disturbing the molecules of rarefied air, is propelled by the cathode or negative pole with great force through the glass walls of the tube and anything else, wood, flesh, steel or stone, between it and the sensitive plate which is to register its rays.

It has long been known that the highly electrical particles which are projected from the negative pole in a vacuum tube produce a strong luminosity (phosphorescence) when they strike against the glass walls of the tube. Prof. Röntgen claims as his discovery, that in addition to this phosphorescence another radiation is produced, which is capable of penetrating through all bodies, passing in straight lines easily through paper, cardboard, wood, flesh, stone, and even steel. One characteristic feature of this new radiation, which distinguishes it from all effects, so far known, of radiant light and heat, is that it cannot be refracted or reflected. The discovery of Prof. Röntgen, if it could be called a discovery, was in a great measure utilizing the investigations of others, and so putting them together and producing results which have startled the world, and which followed out with the enthusiasm and diligence of hosts of scientific investigators may disclose the very processes of life, of the evolution of thought, and the entity of the human soul.

It was a favorite point in the lectures of Prof. Tindal that the insensible waves of heat which are stopped by metals can penetrate through rock salt and that equally unseen actinic (or photographic) waves can penetrate through quartz, but are largly stopped by glass. Almey discovered means of photographing heat waves, and succeeded in photographing, by its own invisible radiation, in a dark room, a kettle full of boiling water. Later it was found that an opaque screen of the hard, black India rubber known as ebonite, is transparent to heat waves. Some seven years ago, by the researches of Hertz and Lodge, it became known that electric waves, though arrested by metallic screens, can pass readily through walls of stone, brick or wood, or through the human body. Crookes discovered that in the extremely gaseous residues in the tubes which he employed, the discharge from the negative or cathode pole cast shadows on the walls of the opposing tube. These cathode rays have been investigated, and by many experimenters, including Goldstein, Wiedeman and Lenard. They were found to be enormously active in exciting phosphorescence, and to travel quite differently from ordinary rays of light.

Hertz showed four years ago that the so-called cathode rays, generated by electric discharges through a rarefied gas, would pass through metal films impervious to ordinary light, and produce optical effects beyond. Lenard showed that these rays could penetrate a considerable distance through the aluminum window, which he placed in Crookes tubes, as the rays pass through that metal much more readily than any other metal or glass, and that they were capable of casting phosphorescence in much the same manner as when they fell on substances in the tube; that they could also penetrate metals and many opaque substances, and were capable of acting upon photographic plates which depend upon the regular capacity to the cathode rays, other things being equal. Lenard also showed that the rays were not only capable of passing through the aluminum from the Crookes tubes, but that they were propogated through a vacuum which was made so high that no electric discharge could pass. In other words, when the rays were set up in the Crookes vacuum by an electric current, they might enter a much higher vacuum, incapable of carrying an electric discharge and traverse such higher vacuum. From this he reasoned that the phenomena was some effect of ether. It will be seen that Röntgen has gone much farther than any of his predecessors. In his hands rays pass through a considerable thickness of wood and metal, and disclose as through a transparent medium, when applied to man, the bony structure of the human frame. It is said that Röntgen claims that the cathode rays investigated by Lenard are different from the rays with which he has performed his brilliant work. This remains to be seen by future experiments, but there is evidently a great similarity between the effects of the rays which both have investigated. In all probability the steps of Lenard's and Hertz's investigations led up to those of Röntgen. Following the line of Röntgen's experiments every day discloses new wonders, and brings out in bold relief facts which astonish the scientific world. Photographs which at first required an hour to produce the desired impression on the sensitive plate are now made in but little over a minute, and it is claimed that a scientist has invented an optical instrument through which the eye can see with the rays as they pass through the dense medium, without the aid of the photographic plate.

Experiments have shown also that a high vacuum is not necessary to produce the photograph. After a certain vacuum has been reached all further absence of air means simply the necessity of more electric power to produce the light, and when great power is used, unless great precaution is taken, the tubes are destroyed by fusing. In early experiments with the cathode rays, Crookes tubes were used, but these was not only very expensive, costing about twenty dollars each, but absorbed fully 95 per cent. of the rays. Edison has prepared tubes of much thinner glass, being but one-sixty-fourth of an inch in thickness, and therefore much more effective than the imported Crookes tubes. These tubes, which he calls fluorescent tubes, can be made at a cost of not more than fifty cents each. In his experiments with these he uses two aluminum disks, one representing the anode or positive pole, and the other the cathode or negative pole. The positive or anode disk or electrode is suspended by a small wire close to the mouth or top of the tube. The cathode or negative disk is fixed in the center of the bulb. It is half an inch in diameter, and is placed on an angle, as if intended to act as a reflector. When a tube is being tested, it is attached to an air pump and also connected with the electric current. When the air exhaustion becomes sufficient the fluorescence begins. As the process is continued various colors are observed in the tube. First the interior is a deep violet, that gradually becomes light blue. At the beginning it fills the entire tube, but it gradually forsakes the interior and seems to cling ro the glass. At that point the tube is hermetically sealed and ready for experimental use. The action and shading of the fluorescence is the only known way of measuring the power of the cathode rays. This will be more certain as the eye from continual practice is enabled to detect the precise shading which experience has shown necessary. In summing up the facts brought out in these experiments we find that the generation of the light takes place when the proper fluorescence is obtained within the tube, and it is caused by the electric fluid in disturbing the molecules of rarefied air. The cathode does not make the light, but propels it with great force against and through the glass of its prison and anything else which may intervene between it and the sensitive plate which is to register its rays.

2. That these rays act readily through wood and flesh less readily through metal, except the lightest aluminum, and hardly at all through glass.

3. That the rays are not perceptibly reflected or refracted or disturbed by the magnet.

4. That a medium—a solution of iodine, which absorbs the short violet rays, does not allow the Röntgen influence to pass, and a medium—a solution of alum, which absorbs long rays, does allow Röntgen influence to pass. It is impossible at this early stage of development to form more than the faintest conception of the wonders to which this discovery may lead. In studying the molecules of matter in the attenuated ether of the vacuum tube, which, propelled by the cathode pole, strike out with such fierce energy as to pass through flesh, wood and metals to the sensitive plate beyond, we seem to have within our grasp and subject to our control, those physical particles which are supposed to constitute the physical basis of the universe. These little particles of radiant matter which exist everywhere through the atmosphere, so minute that a quadrillion of them roam with freedom in a bulb some four inches in diameter, in some of their properties are as material as the floor upon which we stand, while in other properties they almost assume the character of radiant energy, moving with such rapidity as to permeate all bodies and all space, not simply permeating the unoccupied space between atoms and molecules, but filling the entire domain of the physical from atom center to atom center, and from space to space as one indissoluble soul. Without the omnipresent atmosphere or ether of Nature the phenomena would cease. Communication of energy from sun to planet, from constellation to constellation, could not be maintained unless it be conceded that motion, which is an inseperable factor of all energy, can travel through abysmal voids without any medium of transmission. Every step in discovery, along these physical lines, approaches nearer and nearer to the spiritual ideal and the demonstration of psychic energy, which bridges the chasm between mind and matter.

As we touch the border land between the known and the unknown we just begin to comprehend in the shadows which float around us how matter and spirit flow into each other, and we reach out with still more eager hands to fathom the great mystery of life and of evolution. The analysis of the Akasa or ether by the Vedas thousands of years before Christ, and transmitted to the eastern Hindoo sages, receiving from them clearer illustrations and greater force as they came down through the ages, no longer shut up in the mountain monasteries, are springing into new life and strength at the magic touch of science. The cathode rays before which the invisible become visible, and the opaque transparent, are the clairvoyance of science, standing, perhaps, in the same rank in some way not now understood, but reaching the same results as the mental or spiritual clairvoyance which has long been a mysterious but demonstrated fact. In the light of the present and the past it is certainly not too much to predict that at no distant day the birth of thought and its evolution may be seen as clearly as diatomes through the microscope, and the entity of the human soul clearly demonstrated as a scientific fact.

SOME EARLY EXPERIMENTS IN SERO-THERAPY.

By JAMES ROBIE WOOD, M. D., NEW YORK.

EGO IPSE FECI! The kind allusion of the MEDICAL TIMES, desiring me to break my long silence in regard to certain experiments in sero-therapy, encourages me to publish, for the first time, a relation of my experience in that field.

At the outset, let me distinctly declare that I make no claim of priority. Although my first attempts began before 1876, I was led to them by what I had learned from my masters in isopathy. I never for an instant considered that I was looking in a new direction, nor do I now, for those old despised martyrs of their convictions *told the whole story of the law.* Had they possessed our fine microscopes, hypodermic syringes, etc., there might have been no glories left for the brows of recent discoverers of antitoxins. From the belittled isopaths I tried to learn what they had taught, intending, with my poor ability, to carry their ideas one step forward with the improved means at command.

Those noble and misunderstood pioneers have long slept in unhonored graves, under the soil of their German fatherland. Ridicule and scornful revilings had embittered their lives almost beyond endurance *for daring to utter such strange and unorthodox principles of medical belief.* How often is this the story of those who first point the way to any new truth! Their earnest appeal to a scoffing and doubting age is seldom heard or heeded. They may suffer humiliation, sorrow and want, and sometimes banishment, for presuming to act upon the inspiration of truth within them. At last, after a dismal life of failure, they lie down and die, and are soon forgotten by a deaf and blind world. The seeds of truth that they have planted will surely germinate in some later generation, but those who then do wear the laurels which they should have worn, too seldom endeavor to remove the thorns of neglect by reviving and honoring the forgotten names of their masters, who received no recompense for sincere labors that were lost upon the past because the time was not ripe.

When Pasteur and Koch announced their endorsement of the isopathic theory I refused to publish what had already been done, because it would appear puerile, at such an hour and amid universal applause, for me to say *I also did it.* But when disaster followed in the wake of Koch's lymph I prepared a paper on the subject, feeling assured that no motives of vain glory could be ascribed to one who espoused an apparently *lost cause.*

Yet again I hesitated and withheld the article, because many, if not all, of my experiments had been crude and unsatisfactory, and, besides, I dreaded meeting the stony stare of doubt. For several other reasons my early researches were not published in 1876. One was fear of public censure *for presuming to use such a hazardous and unheard-of therapy.* Another reason was because I did not care to be held responsible for placing such a dangerous tool in the hands of careless practitioners. While the majority of physicians would exert great caution in its use, there might be a few who would inoculate patients suffering from curable diseases, *with serious maladies.*

Prior to 1876 I took pleasure in attending the clinics of Prof. Abraham Jacobi, from whose valuable talks I derived great profit. On one occasion he spoke at some length upon the inoculation of tubercle in the lower animals. His words left a strong impression upon my mind. Being already somewhat conversant with the theory and experiments of Lux and his co-laborers during the early part of this century, I began to ask myself, is it not possible, after all, that their maligned law possesses a veritable germ of truth? I became more and more convinced of the value of the proposition *that disease, especially if of a malignant character, may be cured by a mitigated poison obtained from the self-same malady. Or, rather, that many bodily ills bear their own antidotes:*

> "Like seeking like doth
> Like of like beguile."

Nature is ever on the alert to lead us back to health, but she often needs a guide and guardian. May it not be true, after all, that identity and similarity both are our surest means of cure?

In 1867 an old German physician I had attended during an attack of Asiatic cholera, who had been a student of Rokitansky, gave me a large case of ancient vials which he had picked up in Germany many years before. Among them I discovered a number of isopathic preparations from various diseases, labelled "Phthisin," "Hydrophobin," "Scarlatinin," etc. Here was sufficient evidence of isopathic practice in the first half of this century. The memory of these and various other events and circumstances occurring a few years later, especially the remarks of Prof. Jacobi, spurred me on with an enthusiastic desire to experiment in the same direction, and if possible to prove or disprove the law of cure by identity.

In the year 1875 I considered the means, and sought opportunities for putting my plans into execution. In private practice it is difficult to pursue experimental work, on account of the limited number of patients suffering from the same type of disease. At this juncture, without my knowledge or solicitation, the Commissioners of Charity and Correction appointed me as one of the visiting physicians of the Ward's Island Hospital, which has since been transferred to Blackwell's Island and known as the Metropolitan Hospital.

On Ward's Island there was plenty of material in the consumption and cancer wards, suitable for my intended experiments. What was of more importance, I received valuable assistance from one of the resident physicians, Dr. Charles L. Nichols, who has since and for many years been in active practice in Worcester, Mass. His honorable and scrupulous regard for the necessity of exactness and integrity of the too much abused medical and surgical statistics made him watchful of every possibility of error as to the causes of improvement.

As soon as possible, I purchased a number of rabbits for the first trials, as they were considered very susceptible of tubercular infection. Fearing the consequences of exposure of my experiments to the censure of the press, I personally carried my live stock in baskets to the island, and confined them to a close, warm room, such being the best condition for the rapid development of tubercular diseases. These animals were at once inoculated with the sputa from patients who were in the last stage of pulmonary consumption. This was done by hypodermatic injection, and by placing some of the same upon abraded surfaces and sealing them with adhesive plaster. Impatience decided upon a trial of the serum from one of the rabbits, while the tubercular process was, as it were, in transit, and before it had time to locate upon any organ or tissue of the body.

The first animal was killed within one month after the time of its inoculation, and its lungs and other organs and tissues carefully examined. Points presenting the slightest possibility of an approach to disease were removed, and thoroughly rubbed to a paste, and then a part of this was carried on to a thin dilution.

Within fifteen or twenty minutes from the time of the death of the rabbit, in order to anticipate any possible corruption of the serum, a number of patients received the lymph by hypodermatic injection and others the paste, by scraping the cuticle as in the process for vaccination, and rubbing it well upon the abraded surfaces. These were then carefully covered with adhesive plaster.

The great difficulty that had confronted Dr. Nichols and myself had been in the selection of subjects for inoculation. Neither of us dared to risk applying the material to any but advanced and comparatively hopeless cases, in whose condition there could be no shadow of doubt as to diagnosis. In those days we had not the comfort of being able to recognize the tubercle bacilli. Of the cases thus treated one only was strong enough to be out of bed and about the ward. Patiently, as the weeks wore away, we awaited developments. From the hopeless invalids, confined to their beds, there came no comforting sign to give us joy. But the patient who was able to be up certainly did improve, and a few weeks later left the hospital in a fair condition. In each and all, other treatment was continued as before. The one who improved had been taking lycopodium as her only remedy, and this was continued throughout the treatment.

Considering that the solitary case of improvement was in the only subject wherein there was the slightest chance of life, I tried to take solid comfort and renewed courage. But Dr. Nichols, with his strict ideas of judging such cases, argued that we had no right to assume, without many more similar ones benefited, that the serum produced the result. In other words: "One swallow does not make a summer." I, too, felt that unless a large number responded favorably to the serum treatment, we had no excuse for imposing it upon the profession as a valuable addition to therapy. Another reason, which in later years has strengthened my doubt as to the cause of the benefit produced in that one case, is the peculiar behavior of this class of pulmonary patients—*their undying hopefulness.* Whoever has had many such to care for must have frequently observed their sudden brightening up for a few days or weeks, after a distinct change in treatment, either at the hands of another physician or after some entire change in the medicines, or in the manner of giving them by their regular medical attendant.

In our case, the patient having considerable vitality left, and being happily influenced by noticing our constant and intense interest in her, also observing the novel way of applying the treatment, she was inspired with the wonderfully reviving influence of renewed hope. A fair example of this, although a sad illustration of the contemptible and degrading resorts of charlatanism, I will give in the words of the so-called doctor, an advertising quack, who told it to an old acquaintance of mine.

"Harry," said he, "you know my conscience is a pretty tough one, but once it got the best of me. I was called out of town by some one who had seen my advertisement, and found a miserably emaciated young man in the last stages of consumption, and hardly able to sit up in bed. Determined not to have a death upon my hands, I said to him that I regretted very much being unable to apply a certain wonderful instrument, which I kept at my office, to his throat. I told him it was impossible for me, however, to see him again. Imagine my consternation, a few days after, when this same young man, who appeared to be dying, fell exhausted in my office, after painfully struggling up my stairs. I too well remembered the words of mine which had determined his making this frightful effort to reach promised succor. I looked around to find some plausible excuse in the way of an instrument to answer his pathetic demand. Mechanically picking up a glass rod, I applied it with much mystery and care to his throat. When at last I withdrew the sham apology of a remedy, he exclaimed, with a deep sigh, 'Oh, doctor, I feel better already!' And he was really for a time revived and invigorated. But I was not, for my conscience had now had *its first inning.*"

Throughout the experiments no marked symptom of injury or benefit appeared in those confined to their beds, except possibly an occasional variation in temperature. There seemed so little prospect of demonstrating anything by continuing the same manner of preparing the lymph that I rested, for the time being, on my oars, watching, waiting and planning. Being exceedingly fearful that I might inoculate some non-tubercular case with tubercle, I dared not inject the serum in more favorable cases. This fear followed me when I turned my experiments to cancerous affections, as will be seen in my next paper. In no case have I presumed to apply the serum gathered for my trials in cancerous diseases unless there was present extensive ulcerative destruction of tissue.

I am inclined to the belief that isopathic serum therapy is limited in its benefits to a small class of acute and chronic contagious diseases. In such cases it may have a brilliant future, especially during great epidemics.

But sooner or later it will be dethroned by some mightier therapeutic power. The gathering forces of courageous minds in the rising medical generations, bearing the standard of liberty and truth, will down the narrow men of all schools, just as the younger surgeons have already done; and then a system of medicine shall be developed and perfected from the apparently conflicting theories of our day. So complete will be the therapeutic laws of the future that, in a measure, death itself shall be overcome.

In my next paper the account of experiments in serum therapy of tubercle is to be concluded, and then cancer will be taken up. This to be followed later by an article on various peculiar medical fads, and what will be the therapeutics of the future?

P. S.—Several years ago, I received a letter from Dr. Charles L. Nichols, of Worcester, informing me that he still kept some of the vials of our preparations from tubercle which we made in 1875.

To-day, February 19, 1896, I have received a letter from Dr. Nichols, to whom I had submitted a summary of what I have written in relation to our experiments. In this letter he replies: "I think what you have written is fair and just."

CHRONIC GASTRIC DYSPEPSIA.

By F. P. Warner, M. D., Canandaigua, N. Y.

DYSPEPSIA is a term used to define a train of symptoms caused by a functional derangement of the digestive processes.

In regard to its morbid anatomy there is none, except when long continued the stomach walls may be thinned, the mucous membrane atrophied, and shrunken with fatty degeneration.

Its etilology must be understood to treat a case successfully.

It may be inherited, and accompany also advancing years.

There are a class of cases in which there is a deficiency of the quantity of gastric juice secreted. These cases are generally of the enfeebled constitutions who have been weakened by overwork, by poor quality of food, by narcotics, tobacco, excesses of any kind which undermine the bodily condition.

This chronic disorder arises from the persistent and almost imperceptible disturbances arising from the disintegration or death of cell structure, the downfall of force and the faulty elimination of waste products.

This you see in the system in which the ravages of phthisis is making its onslaught, in which the fibrous tissue is attacked and leads the victim on to a lack of nutrition and to consumption, or attacking the hepatic functions and culminating in inflammatory rheumatism or gout. In this class of cases, as with the muscular troubles of the stomach, we often have to look beyond this organ to find a cause of the diseased states, as to the thin and impure blood, to the weak and tired nerve centers, and to impaired cell activity throughout the body.

The fault may lie in the tissue-forming material of the body or blood, or this important fluid may be charged with poisonous material absorbed from the alimentary canal or from a faulty action of liver, or whatever would produce anæmia, chlorosis, malaria, lithæmia, kidney diseases, etc., but the chief factor always present, always active, affecting secretion and muscular movement, is impaired nerve supply.

As you look over your cases you will find that dyspepsia occurs in the neurotic individual, in those who are foremost in the reckless pursuits of modern life; in those who are on the highway along which honors are to be lost and won.

Among those in whom sudden reverses come, and hence subject to intense emotion, shocks, great sorrows, and the overworked, whose nerves cannot stand the strain and worry of business competition. How often are we called upon to prescribe for the dyspepsia of the indolent, the day laborer, the farmer, the man who never worries, or the person—man or woman—who is clothed in flesh, plump and round, as some of those well-fed gentlemen and ladies whom you can name? Ay, is it not rather the man or the woman who has the lean and hungry look, who always does things in a hurry, who always goes through a door before he gets to it, who has never time to say good morning, who goes to his business and frets and worries all the day long, and goes home at night to scold the wife and children and to spend the night tossing upon the sea of wakefulness, and rising in the morning to take his tea and toast, and then to spend an hour waiting to see if it is going to distress him instead of perusing his morning paper or frolicking with the children? I would emphasize this point of the neurotic element in dyspepsia, because I would have you remember that your greatest failures will lie along this line, and when you sit down and wonder at your failures, why your pepsin and pancreatin, your dyspepsin and papoid, and whole list of such digestive remedies have failed to help your case, that you will come to your senses and see that you have been prescribing for an effect instead of a cause; that you have been treating a stomach which was all right in itself, and neglected the great central nervous system, which has been goading and tormenting and besieging an organ secondarily.

Secondly, there are another class of cases characterized by an excess of the gastric secretion. This is most apt to occur in those of a fleshy constitution, or those who suffer from a hepatic disease, or in gouty subjects.

Other causes may be found in a change of the gastric secretion, impaired motion of the stomach, prolonged mental and physical labor, or a deficiency of labor, and also in irregularity of and improper eating. We must not also forget the sympathetic dyspepsia occurring in those with disease in the remote organs, as of the uterus. When we consider how the stomach is disturbed, as in the morning sickness of pregnancy, we see that this and similar uterine diseases are a great underlying cause in many forms of gastric irritation.

The symptoms of chronic dyspepsia are so manifold and of such a varying nature, and must of necessity be so familiar to all, that we deem it not necessary to enter into a discussion of its many peculiar characteristics.

The only disease with which chronic dyspepsia can be confounded is chronic gastric catarrh, which is an advanced stage of dyspepsia. Atonic dyspepsia is generally associated with anæmia, dependent on habits of life or unhealthy occupation, while gastric catarrh is a result of alcoholic stimulants, or associated with some other disease in the body, as of the thorax, kidneys or liver.

Atonic dyspepsia has little or no pain nor tenderness in the stomach, while gastric catarrh has much of it.

Atonic dyspepsia has a loss of appetite, often with a broad, flabby and pale tongue, while in chronic gastric catarrh there is a more profound physical disturbance, with a coated tongue. Spices and stimulants relieve the atonic dyspeptic and increase the symptoms of chronic catarrh.

The urine is not disturbed in the dyspeptic, while in gastritis, it may be alkaline and deposit urates, oxalates, phosphates, etc.

Now, how are we to decide upon these different forms of dyspepsia, as much of our success in the treatment depends upon our proper differentiation of the case?

There are many scientific methods of examining these cases, and diagnosing the different forms of it, but many of these methods are expensive and difficult, and would require a laboratory, and a thorough knowledge of chemistry and bacteriology.

But there are simpler methods which the busy practitioner can use, and which will assist him in the arrangement of his cases for the successful treatment of them.

If a patient comes to you and utters a complaint against a rebellious stomach and he is not clear in his idea of his distresses, when and how he is most affected by his meals, suppose you tell him to eat a plain breakfast of hot milk and water, or tea or coffee and some bread without butter, keeping the amount of fluid below a pint and note all his distresses.

If at the end of a half hour or so he complains of pain and a bad, uneasy feeling in the stomach which ends with hard pains, cramps and vomiting, there is some muscular and nervous disturbance of the stomach, or inflammation or irritation of the duodenum.

If at the end of two hours there is only heat, burning water brash, acid rising into the throat, and burning in the fauces, here we have a hyper-acidity, or an increase of the hydrochloric and other acids of the stomach.

If at the end of two or three hours there are no such symptoms, but a feeling of weight, pressure load on the stomach, tightness about the waist, fulness, eructations of flatulence, etc., we have then a case of deficiency of the gastric juices of the stomach, and if severe, atrophy of the gastric glands and thinning of its walls, with dilatation, etc.

In nervous dyspepsia, pain is one of the most prominent symptoms, and is not always associated with the kind of food taken, even a little cold water often exciting the pain. Fatty and acid fruits are quite sure to excite the pain. In this form the appetite may be ravenous, or lost altogether. Should the above test meal not prove satisfactory nor the disease yield to treatment, it becomes necessary to ascertain the exact condition of the stomach and gastric juice, which is done in the following manner: To test for hyper-secretion, wash out the stomach at night just before retiring, or three hours after the evening meal. Then in the morning, before the patient has eaten anything, let him swallow the Einhorn bucket, or, which is better, introduce the stomach tube and syphon out some of the gastric juice. If this juice contains more than 50 cubic centimeters, hyper-secretion exists, and the acid nature of it may be found by the Günzberg test.

If atony exists, not having worked the stomach the night before, the morning's washing will contain particles of undigested food.

Bacteria and all forms of germs must be discovered by the use of the microscope when there is a great deal of flatulence and fermentation.

And so in different ways, the description of which would be too long for this paper, we must test for the origin of the peristaltic action of the walls of the stomach, and also the rate of absorption from the mucous membrane.

In regard to the treatment of these different forms of dyspepsia diet plays a most important part, as well as the manner in which food is eaten. Many of our American business men never have seemed to learn the important part that good teeth, properly used, have in the economy of digestion. The "quick lunch' is something every physician ought to enjoin upon his patients to avoid, instructing them not to make the stomach do what the teeth ought to do. Slow eaters have much less of stomach difficulties than those who "eat and run."

What kinds of foods do these different forms of dyspepsia require?

For those suffering from hyper-acidity the diet should consist largely of rare, finely-minced beef, stale and toasted bread. Then, when improvement sets in, there may be allowed fresh vegetables and sub-acid fruits, the former of these well cooked and pulverized, the latter stewed and baked. This should be persisted in for several weeks.

For deficiency of the gastric juice or for atonic dyspepsia, beef, mutton, poultry, well cooked, for the breakfast and noonday meal, with soup, broths, stale bread, crackers, etc. A reasonable variety and moderate use of condiments are allowable in this form of dyspepsia.

In the nervous form of this trouble, here above all others should we impress our patients with the necessity of slow eating, and thoroughly masticating the food. These are the ones who are the most liable to eat rapidly. They should avoid tea, coffee, alcohol, pickles, condiments, pastries, and above all, over-eating. Food had best be taken often and in smaller quantities, even a light lunch at bedtime, and never to eat when fatigued or worried.

In the flatulent form, which is often seen in the nervous woman, there should be avoided all sweet and starchy foods. All fluid should be drank an hour before or two hours after eating.

Some have recommended to abstain from meat and vegetables at the same meal, using only one or the other. Cream is better for the coffee. Tea should be avoided, as well as malt liquors. Saccharin is best for sweetening the coffee. In some cases where the above does not agree, the reverse must be tried, and instead of meats use vegetables only.

Approaching the medical treatment of this disease every physician must be a law unto himself, and every case a law unto itself, as in no disease is there a greater variety of remedies required.

In all these different forms lavage plays a most important part, washing the stomach first with warm borax water, and immediately follow with warm water, colored well with hydrastis or listerine. This, of course, before the meals, or three or four hours afterwards.

In the form of hyper-secretion with hyper-acidity, lemon juice, sour cider and the mineral acids afford much assistance, and in some cases grape fruit, oranges, etc. The sulphite of soda and salicylic acid act well, together with such attenuated remedies as nux. vom., puls. *Robinia*, carbo veg., kali. carb., podophyl., merc. dulc., sulphur, etc.

When there is a deficiency of the gastric juice we should endeavor to increase it by alkaline mineral waters, taken warm, as vichy, seltzer, Apollinaris, Clysmic, etc., before eating, and also bicarbonate of soda, phosphate of soda, or soda salicylate, in hot water, half an hour before meals. In this condition we often get atony and atrophy of the gastric glands with hypetrophy and dilatation.

We must select our remedies from those which act through the gastric plexus of nerves as well as the central nervous system.

Here electricity often aids us.

Strychnine, ignatia, gentian, colombo, or the bitter tonics, and hydrastis, helonias, etc. Pepsin and pancreatin, with ginger and bismuth, act well in most cases. If there is much flatulence we should use sub-gallate of bismuth, creosote, carbolic acid, etc. A good combination is also crude charcoal and milk sugar, equal parts, with one-third as much pepsin and one-eighth as much salicylic acid, with a sprinkling of ginger or cubebs powder. Dose, 5 or 10 grains, after meals.

In the painful form of this disorder, where the physician is required to make his most careful prescribing, remedies such as abies, argent nit., aurum, zinc, arsenicum, bismuth, resorcin, ignatia, coffea, cham., codiea, chloroform and cocaine. If the liver is torpid, as is the fact in many of these cases if constipation co-exists, the euonymin 1x, with the pepsin and pancreatin, acts well. If diarrhœa is present the dermatol takes the place of the euonymin.

If I do what I may in earnest, I need not mourn if I work no great work on the earth. To keep the growth of a thought that struggles towards the light; to brush with gentle hand the earth stain from the white of one snow drop, shall be my ambition.

APPENDICITIS: REPORT OF SIX CASES.

By W. W. Grant, M. D., Denver, Colorado.

Better and more accurate methods of diagnosis will not alone explain the frequency of appendicitis. It bears a close relation to the dietetic habits of the people. It will continue a common disease as long as people depart widely and habitually from a wholesome regimen and the plain demands of hygiene in habits of living. I do not overlook constitutional vices and tendencies in certain cases. It is my opinion that, in most cases, the individuals have been much troubled with indigestion for some time previous to the acute attack, a catarrhal condition of the cæcum preceding and accompanying the disease.

The theory of Talamon and Rochaz, that the disease is generally due to a concretion or calculus, is not sustained. Ekehorn believes that the bacillus *coli communis* is a common etiological factor, and this is more generally accepted; still it is *sub judice*. It is the belief of many surgeons that this bacterium is the cause of the extreme fatality in general septic peritonitis, being always found in these cases, and absent in those that recover.

Dr. Maurice Richardson, of Boston, a surgeon of wide experience, writes me that he has never known of a recovery under these circumstances. Whatever theories may obtain as to its cause, pathology and symptoms, it is evident that the disease is not infrequently overlooked, and even with a correct diagnosis the mortality is yet large.

With the view of presenting certain features and forms of the disease, I give the brief history of a few cases:

Case I.—Mrs. C., aged twenty-eight, married. I saw this patient in consultation on March 20, 1893, the tenth day of sickness. Had much pain in right hypogastrium, fever from the beginning, and chills for the last few days. Temperature now 104½°. The swelling or tumor extended from the anterior spinous process of the ilium to the border of the right rectus muscle.

The attending physician had been in some doubt as to the nature of the trouble, thinking it might be abscess of the broad ligament. There was no longer any doubt that it was an appendical abscess, and I was requested to operate.

I made a free incision, and evacuated a large quantity of pus and fæcal matter. Irrigated with salt solution and drained with iodoform gauze.

Recovery uninterrupted, and patient sittting up in two weeks, and wound closed in six weeks. Recovery perfect and permanent, with greatly improved digestion.

Case II.—Louis McC., aged twenty-four. This patient was brought to me from Goodland, Kan., by Dr. Worrell, with diagnosis of appendicitis, on June 25, 1894, the seventh day of sickness. Tumor and history similar to former—undoubted abscess, though much smaller.

I operated immediately on arrival at St. Joseph's Hospital. Incision external and parallel to the cæcum. A pint of pus and scybalum evacuated. Irrigated with sublimate lotion, 1 to 4,000, and drained with iodoform gauze. On seventh day after operation, fæces washed from wound, but none after this date. Patient discharged well, on fourteenth day after operation. He is perfectly well to date. These two cases well illustrate the common form of circumscribed abscess from perforation of appendix. The latter is excluded by adhesions from the peritoneal cavity. The abscess is extra-peritoneal, and the operation should be. With this object in view, the incision here made is preferable to the Willard Parker incision, parallel to Poupart's ligament. Besides, the danger of ventral hernia is less. The danger of rupture into the peritoneal cavity, and death from septic peritonitis, is too great to admit of one hour's unnecessary delay, when it is known that pus exists—chills followed by increased temperature and pulse specially indicating it. No special effort should be made to find the appendix in these cases. It would be bad surgery to break up adhesions for this purpose. There is no compensation for the increased risk, and if a rent is made into the peritoneal cavity the patient will probably die in consequence.

The treatment by free incision and drainage is entirely successful. The patients do not suffer from subsequent attacks; and even if one should occasionally occur, a subsequent date is infinitely preferable for further operative interference. The suppurative process doubtless destroys the appendix, and it is as incapable of further harm as if cut off by the knife.

Case III.—Dr. R. W. Corwin, of Pueblo, was taken sick on March 7, 1894, with great pain over appendix and abdomen, with vomiting and purging, latter lasting four days; vomiting ceased in twenty-four hours. Temperature 102°, pulse 116. Both reduced and patient better after twenty-four hours. Continued to improve in every way until the 14th, when he got up and visited a patient, temperature being about normal. He was immediately worse, and retired to bed again, but did not keep it faithfully.

I saw him on the evening of March 17th. Temperature 100½°, pulse 96. A small but well-defined appendical tumor. Was satisfied that neither pus nor perforation existed.

The question of operation was immediately presented and had to be determined at once. His history and local and general condition indicated that, with absolute quiet, proper diet and good care, he would get over this attack without operation.

This case was a forcible illustration (tenth day of sickness) of the lesson that it is sometimes too late for an early operation and too early for a late one, so I advised delay and the removal of the appendix when over the acute attack. During convalescence he visited his home in New York City, and on April 20th the appendix was removed by Dr. McBurney. He was in hospital four weeks. The organ was sacculated; the lumen obliterated not far from cæcum, and at the distal extremity a small cavity with no pus or concretion, surrounded by thickened, hardened walls of the appendix. An operation in the first few days of sickness in this case might have been indicated. But inflammation, breaking adhesions, and traumatism at a later date would have rendered the result more doubtful.

Case IV.—On April 14, 1895, was called to see Dr. W., at his residence in this city. Had a short attack a year ago of supposed appendicitis. Sick now several days. Temperature, 101° evenings and 99° mornings, pulse 84 to 96. Had much digestive trouble for a long time; considerable bloating of abdomen and some pain. No well-defined tumor, but steady, deep pressure revealed a hard swelling beneath the cæcum. My expressed opinion was that he had appendicitis; that its situation was the ileocæcal fossa; that if pus formed. it would be in the most favorable situation—retro-peritoneal—and suggested that an operation might be necessary soon. To this he did not take kindly. I saw him two or three days, and he improved so much that my visits ceased.

On the 21st he walked into my office, looking pale and bad, with a temperature of 100½°. He believed that he was suffering from a mild typhoid fever. On the 23d he sent for me. Temperature, 101°; tympanites more extensive. I reiterated former opinion, and the next day he was convinced by rupture of the abscess, fortunately into the bowel. He passed during the day a large quantity of most offensive pus.

His complete recovery was now uninterrupted. Had he died, it would doubtless have been considered to be due to perforation of the ileum from ulceration of Peyer's glands. There are excellent reasons for the opinion that many patients die, though fewer than formerly, from perforative appendicitis, when it is called perforation from typhoid ulceration or perforation from inflammatory pelvic diseases.

Case V.—Mrs. F. L. W., aged twenty-two, married; Denver.

I was called on the evening of Jan. 23, 1894. Pain sharp and acute all over abdomen. Pain and tenderness greater over appendix. Patient had taken a dose of Hunyadi water and had purged freely, attended with some nausea; pulse 120 and weak, temperature 100°.

Gave hypodermic injections of morphia and atrophia, which induced a fairly quiet and good night. Morning of the 24th patient felt much better; pulse 108, temperature 100½°; tumor small and circumscribed; tympanites moderate.

Condition remained about the same until morning visit January 25th, when temperature was 103°, and I advised immediate operation, and, at the same time, requested consultation. After several conferences the operation was delayed until noon, January 28th. The temperature was now 104½°, and patient very weak.

Dr. J. W. O'Connor was called in council and I proceeded to operate, making a straight incision over cæcum. On opening the peritoneal cavity, gas with marked fæcal odor was at once manifest. Introducing the fingers, the appendix, containing a concretion, could really be felt, and was drawn into the wound and ligated. It was soft and thoroughly gangrenous and the distal end contained a large fæcal concretion. It was surrounded by small abscesses which had ruptured, and by means of which gas and a small quantity of fæcal matter had escaped into the peritoneal cavity. The walls of the caecum were so thick and hard from inflammation that the opposing surfaces could not be approximated, and the entire peritoneal surface was covered with a gray and greenish lymph.

The general infection and the bad local condition rendered pouching of the stump impossible, and a fæcal fistula probable. A piece of omentum as large as the hand was removed because gangrenous. The intestinal and abdominal peritonium was much infected, and there was incipient general peritonitis. Irrigation was not employed for fear of spreading the infection, but the cavity was cleansed by sponges. The caput coli was enveloped in iodoform gauze and the ends brought out of the wound. The coils of the ileum were isolated from the diseased tissues as much as possible with the same material and brought to the surface in the same manner; antiseptic dressings and bandages were applied to the abdomen. I regard no drainage material as equal to gauze for infected localities. Digitaline and strychnine injections were given hypodermically before the operation (a good rule to observe in all severe operations), and during this operation repeated injections of nitro-glycerine and additional strychnine, the patient not requiring much ether.

She reacted very well, and with reasonable promptness. After the operation much difficulty was experienced in moving the bowels. Enemata were given with no success, and, on the third day, a dose of Hunyadi, as distention was becoming troublesome.

January 31st, fourth day after operation, intestinal paralysis was evident and distention increasing, causing much distress.

February 1st, condition of patient very bad; was vomiting, without nausea, and with practically little effort, large quantities of dark, liquid matter of strong fæcal odor. I determined in this emergency to aspirate the colon. No anæsthetic was given, and, with Dr. O'Connor's assistance, I introduced No. 2 needle (Codman & Shurtleff) into the middle of the transverse colon, and evacuated two quarts of dark, offensive liquid, and a large quantity of gas. With assistants pressing the abdominal walls, the contents were all forced in the direction of the needle, so the evacuation was quite complete. Patient expressed immediate relief; vomiting ceased at once, and in twelve hours the bowels commenced to act without artificial means.

Improvement continued from this time on. A fæcal fistula resulted, but closed without operation in two months, a tortuous fistula, not fæcal, remaining two months longer.

Following severe operations on abdominal viscera, and especially the bowels, intestinal paralysis occurs with sufficient frequency to merit our profound interest, because always dangerous and difficult to manage. I am not aware that aspiration for both gas and liquid has been previously done for this condition. Palpation and percussion showed that both existed in this case before the application of the remedy.

Dr. Richardson, who reports over 200 cases of appendicitis, in a letter to me states two objections to the needle in this condition (though he has not used it for this purpose); has known the knife to be used by Dr. Warren in one case, with good results: First—"If needle is small, will become obstructed; and if large, lead to extravasation." We cannot entirely escape danger. I believe neither objection well taken; for the distention being always due largely to gas, is relieved before the needle is withdrawn (and in the act, suction should be maintained).

The collapse and elasticity of the muscular fibers close the opening the moment of its withdrawal. Besides, no needle smaller than No. 2 should be used, and No. 3 may be with safety. This method is safer and better than the additional shock of ether and a second cutting operation. In the knowledge and experience of Dr. Richardson fæcal fistula are not uncommon, and usually heal without operation. In such a history as this—sudden attack, sharp, intense pain radiating from the appendix and extending over the abdomen, with nausea, diarrhœa and fast, small and weak pulse, with evident shock, indicating, as I believe, perforation, partial or complete, of appendix—I believe it would be best to operate as soon as reaction is established, if the temperature is 100° and a tumor can be felt.

Case VI.—E. A. Watrous, New York City, aged thirty. Taken sick in Leadville, Friday evening, May 10, 1895. Came to Denver accompanied by his physician, Dr. B. S. Galloway, Monday evening, May 13th, and placed in my charge. Was taken to St. Joseph's Hospital. I saw him at midnight with well-defined tumor over appendix; temperature 101°, pulse 80 Had a chill *en route* to Denver. No diarrhœa or vomiting; tympanites moderate. When I returned in the morning to operate, his temperature was 104°, pulse 96. I was satisfied the latter was naturally slow, and this was confirmed by convalescence, pulse being 60. I made a longitudinal incision a little external to cæcum and entered at once the peritoneal cavity. Appendix readily found. It contained pus throughout its entire length; had no concretion. On lifting into the field of vision for ligation, a little pus escaped through a pin-hole perforation. It was tied near the cæcum and cut off. A part of the adjoining mesentery, much inflamed and covered with grayish lymph, was also ligated and cut off. A piece of omentum half as large as the hand, badly inflamed, was treated in the same manner. I present the appendix as an excellent specimen of the gangrenous form—similar to former case, though not in such a bad state of decay and disintegration.

This form of the disease, with the appendix hanging in the pelvic cavity, is most dangerous of all, and gives no time for deliberation—perforation, as a rule, inducing a rapidly fatal general peritonitis, the colon bacterium of Escherisch giving it its intensely unfavorable character.

The patient is walking about, and will leave for his home perfectly well.

With a certain diagnosis, when to operate, if at all, is a most interesting problem. I believe the teaching of Reclus—that the operation should be performed in every case as soon as the diagnosis is established—has more advocates in this country than any other.

On a former occasion before this Society, in reporting an operative case, I presented the statistics of Bigelow against this practice, as well as the opinions of others in its favor. Am frank to say that I have little confidence in the teaching of such figures. For obvious reasons they are misleading.

I am more than ever convinced that every case of decided severity should be operated on, not necessarily immediately, but it will be required sooner or later; in most of these cases, though, within a few days. No iron-clad rule can be laid down as applicable to all cases. I reiterate my formerly expressed opinion that each case should be judged on its merits as to operation and time of operation. Some will die if operated on at an unfavorable time, that might have recovered without; but more will die if not operated on at all. All recurring cases should be operated on, preferably in the interval, because the most favorable time.

In the four cases of this report operated on by me, it would have been better and safer if the operation had been done sooner in each case. Cases V. and VI., both intra-peritoneal, bad and unpromising, would have died in a short time but for the open method of treatment by gauze. No form of tube and no other form of drainage material answer the purpose so well.. In Case IV. the operation was not clearly indicated in the very early stage, but it was before the abscess ruptured.

HEART FAILURE.

By J. A. Carmichael, M. D., New York.

A BILL is now pending before the State Legislature in which there is much good, because, among other useful suggestions, it especially proposes the abolition of the office of coroner in this city, as at present constituted. From the reports that are constantly being given to the public through the medium of the press, and through individual experience, of the methods, legal and illegal, mostly the latter, that are pursued in the administration of the functions belonging to the office of coroner, it may truly be said that there is not only the exhibition of pitiable ignorance, and of its necessary concomitant, brazen impudence, but the merest travesty of justice, and of the obligations imposed by the duties of ascertaining the cause or causes of death, and of deciding as to the criminality or non-criminality by which death has been produced. Take the average coroner of the City of New York, and you have the veriest Dogberry in office, even more veritable than the one that Shakespeare drew. How can it be otherwise, when the same processes make a coroner of him that elevate to a judicial seat so many so-called "justices" that disgrace the civil courts, and make the administration of the law "a delusion and a snare?" If it be the legitimate function of a coroner to ascertain the cause or causes of death, what, we ask, does the general report make of the fitness of the average coroner to determine whether it shall have been effected by violence, or by any other of the innumerable incidents or accidents by which life may be suddenly terminated, whether the cause be from without, extrinsic, or from within the body, the result of disease in this, that, or the other vital organ or organs. Are coroners appointed as such, from any consideration of their education, knowledge or acquirement of any kind whatsoever? Does the average coroner know "B from bull's foot" of any known science under the sun? or is he instructed or required to be instructed in anything else than the duties and obligations—honorable, we believe they are called in the political world, God save the mark—that may appertain to him because of his being supposed to have a "political pull," or to be a "heeler," pliant and crook-backed, so that his political pals can climb over him, and put a lot of other Dogberrys in office? Does the average coroner know a heart from a kidney, a brain from a bladder, a lung from a liver, a testicle from a tibia, an ovary from an omentum, or an uterus from an umbilicus; and, in the matter of disease, can he tell a carbuncle from a cancer, a boil from a blister, or a bruise from a bunion? Among the many excellent and praiseworthy services rendered to the public by the New York *Herald*, in its pursuit of and insistence upon matters of sanitation and various other subjects tending to the benefit of the public weal, and the promotion and preservation of the public security and protection, there is not one more important than that under our present consideration. Can there be a more pregnant question than that involved in the few words, How we die, and why we die?

In its discussions, daily repeated, of the innumerable host of subjects of vast and widespread interest to humanity, the great paper recalls, with still increasing zeal and earnestness, this question of the coronership, and the pressing need of its obliteration in perpetuo, and the immediate substitution of other and incalculably more valuable and efficient methods by which the question, how we die and why we die, may be solved and definitely settled, and the responsibility for the accurate discovery and knowledge of the cause or causes of death may be assigned to well-known professional competency, medical and legal. This brings up a second question for investigation as to another integral element, and a most necessary one in the construction of the coroner's department of the city's municipal organization, viz., its medical element. For a proper estimate of the value and efficiency of this element, as it now exists, the public is equally indebted to the incisive scrutiny and discriminating judgment of the *Herald*, and what do we find? Again the everlasting political "pull" is the potent creative factor of place and emolument—you wriggle me in, and I'll wriggle you in, that's the shibboleth, the sesame, that opens doors, and inducts the sanctified and regenerate soul in among the other elect. It doesn't matter whether he knows anything about anatomy, physiology, pathology, surgery or any other of the requirements of a complete medical education. He has been whitewashed all over, and now his fleece is snow white and immaculate. The imprimatur of the order of the elect is upon him. That's enough, he's one of them, and worthy the confidence of all men! The great City of New York abounds in men with medical ability of the highest order, who by their education, association, professional attainments, and the authority that such attainments justify and compel, could and would give a dignity and a force and power to the decisions that were promulgated by them, that would command universal respect and confidence, and so cleanse and purify the department now known as that of the coroner, that there would be one "Augean stable" the less in this poor politics-ridden community, that has so often lifted up its supplicating hands and cried, "How long, O Lord, how long."

It would be difficult to improve upon the wisdom and foresight of the philosophers of old, and many a lesson that served as a guide to the intellectual, moral and physical lives of men, in the remote past, can, and does equally serve at the present hour. When the words "Coeslum non animum mutant, qui trans mare currunt"—They who cross the sea change their climate but not their natures—were written they were destined to come down through the ages, and to be repeated in all the manifold varieties and phases of human life, wherever human life existed. Moreover, may it be said in all truth, that in no conditions in which the lives of men are passed do the tendencies and proclivities to evil ways, which unhappily form so large a part of human nature—"human um est errare"—find such congenial soil for rank growth and noisome luxuriance as in the field of political strife and contention. It is a field sown with the seeds of evil passions, of a depravation of the moral instinct, and its husbandry garners hate and selfish greed. Let us go to the focus of convergence to which legislative wisdom —so called—hastens at each returning anniversary. Laws are to be designed, constructed and enacted for the security and well-being of the dear people, *and we, their lawmakers, owe allegiauce to the popular will!* The tailors of Tooley, it will be remembered, proclaimed the same in the historic "We, the people of England," and we all know how fared that loyal proclamation. Is it any better in the more modern legislation? The average coroner has his legislative congener and co-worker, and the "pull" equally flourishes, "like the green bay tree," whenever and wherever politicians and lawmakers most do congregate. Possibly there might be some utility in following up and reviewing the tendencies and purposes of the life of the generic lawmaker, as we see and know him. But the daily newspaper, that should be a digestive help, chronicles the doings in the halls of legislative pulldom, and, as we read, gall substitutes appetite, many a wholesome breakfast is unstomached, and we go hungry. Let us look onward a little, and speculate upon the probable fate of the bill that has, with perhaps meek supplication, gone up to Albany to be adjudged by legislative wisdom. There, the average coroner, and the average legislator, with their "heelers," are in force. Into many an ear is whispered the shibboleth, Wriggle me in, and I'll wriggle you in, and nodding heads and sweet smiles prevail all over.

The bill is an honest one, and embodies the best intelligence and the best purpose for the public weal. But what of that? There's no "pull" in it, and professional wisdom and sanitary science are nowhere. Contumacious Dogberrys and legislative Solons are to the fore, and thick as blackberries when the summer suns come. We were going to say, "thick as thieves," but we remember that once upon a time the tailors of Tooley embodied England, so we must "stand upon the order" of our speech, and bow to law and its makers and framers. Here we might legitimately submit the propriety of the selection of our caption—heart failure—not to coroners or lawmakers, but to the higher court of scientific argument. Previously to that, however, a few additional words will show that in the whole range of easy and slangy expressions, borrowed from pseudo-science, there are none in more common and general use than those of heart failure, malaria and a visitation of God!

If ever there was a Godsend on this earth, it came to the New York Coroner's Department in those three words. But we very much doubt if the Almighty ever had anything to do with such a God-forsaken concern. They must have been made for the special benefit of New York's coroners by some very remote coroner politician, some ancestral seer or soothsayer or occultist, or perhaps some prescient broker who had a "corner" in them and speculated in "futurities." So, we take back the word Godsend and say that, if ever there was a boon given to cover up and hide shameless ignorance and pretension, it is embodied in the words heart failure, malaria and a visitation of God. The pounding of them into the public ear, to satisfy public curiosity and credulity, has pounded and driven the nails into many a coffin, to be shuffled away and forgotten. They should be written over the entrance to the Coroner's Department, or worn upon the foreheads, as did the ancients their phylacteries, to show the wisdom within, or, still better, to turn the curious eye from too close scrutiny of how little of wisdom there really was. A few words might be pertinent just here in another direction as to a possible change in the administration of the Coroner's Department, and the induction into office of a representative of a higher sphere of professional acquirement. The days of Dr. Pangloss, who overawed the "profanum vulgus" with cocked hat, beribboned peruke, and gold-headed cane, and pompously repeated "For what are we doctors," have gone by, and the immortal "Médecin malgrélui" is among the records of the past. But there is still a survivor in lineal descent, who though he may have gathered the "pulveren olympicum" in the arena of science to a degree, and rubbed elbows with professional dignitaries, yet for all that may be a mere politico-professional hack, "full of wise saws and modern instances," and not have learned anything new for twenty, maybe forty years. "The woods are full of 'em," and so are many of the municipal offices in this city. So we sincerely hope that a *live* man, and one inspired with the energy of constantly accumulating knowledge, may fill that long-continued vacuum, and that no more reports of heart failure, malaria and visitation of God may vex the public ear, and make, of the department of coroner, a thing at which shoulders may shrug and heads may wag. Of heart failure, we undertake to say that there is no such thing as heart failure, per se. No heart that ever beat, ceased to do so of itself and by itself, but because of the sudden or gradual diminution or obstruction of the subtle vital principle, nerve and ganglionic force, that animates and has animated its pulsations from the moment of its existence, as the just impregnated ovum, if the rhythmic move of that plasma of intensely vital matter may be said to assimilate it with what will soon be the true cardiac rhythm—to that other moment when it stops, like a clock run down, its last throb the faint jar of the door that opens upon eternity. The heart will cease to beat because the perfection of the mechanism of its organic structure—the anatomist and physiologist are thoroughly familiar with that wonderful perfection—has been marred and destroyed by the invasion of disease from many sources far removed, with the morbid effects of which upon the heart and its structure every physician is, or ought to be, fully instructed before he undertakes the duties of his profession. The first heart failure, so-called, of which we have any knowledge, comes to us through Holy Writ, and it recites the case of Peter, the apostolic apostate, who denied his Lord, and who, upon the crowing of the cock, that had been foretold, "went out and wept bitterly." Now in this case we must suppose, inasmuch as there is no record to show that he had any special cardiac disease, his heart failed him from an emotional cause, and under the stress of remorse he got away from the intolerable shame. What a blessing to this community at large a little more heart failure would have been, and would be, among many political incumbents, past and present. But, bless your soul, there's too magnetic a force latent in the cohesive power of the public plunder, to hope for the exhibition and exercise of any such virtue as that. There are precious few Peters left nowadays, if any, and even they, on a pinch, would most likely deny anything, and the only tears they would shed would be wrung from them by failure to wriggle into office. The second instance of heart failure that has been handed down to us, presents characteristics of a more substantial quality, indeed of a metallic nature, represented by thirty pieces of silver. When the Saviour sat in the midst of his disciples at the "Last Supper," the Ultima Coena depicted with such loving reverence by Leonardo Da Vinci, and so often since by the Italian pencil, He said: "One of you shall betray me." Then came the eager and breathless inquiry from each one: "Lord, is it I?"

The heart of him who did betray his Lord began to fail, "and he went and hanged himself." But Judas Iscariot lives more multitudinously to-day than when Christ walked the earth. The weight of the bag of thirty pieces of silver is not fatal to the physical body in our day, no matter how acquired, but if the malady strikes deep it is deadly to the best impulses of the human heart and soul, intellectual, moral and emotional. We learn wisdom sometimes from the humblest sources, and there's pith and moral sustenance enough in a lesson taught by ignorance to last a lifetime.

Said an old negro preacher, down South, to his congregation, whom he was exhorting upon the sin of covetousness and the love of money, "I tell you what de bible do say 'bout dat dar sin. It say the love of money is de root of all evil. Ef dat is so, ten it's 'stonishin' how hard you niggers, yes, and de white folks, too, tries to help one anudder out of all dat root you kin git, and I spec you is gwine to keep on trying ontel de judgment day."

Lastly, it would be both interesting and instructive to review, at length, the diseases and accidents that overwhelm the heart, and stifle its vital activity, even though in many instances its structural integrity may have been perfectly preserved. Again, it would be equally useful to note the effects of those diseases that implant their morbid products upon the cardiac structure, thus exercising a mechanical force and power upon that organ, and interposing a physical obstruction to the due performance of its functions, without which there can be no life. But the editorial dictum, thus far shalt thou go, and no farther, stops the way, and we must be content with a mere mention of some of the accidents and diseases that may and do produce the "heart failure" of the Coroner's Department, and let the reader see what a multitude of sins of departmental omission, commission and ignorance may be, and is, covered by that convenient term "heart failure."

Let us consider the morbid conditions that may affect the heart, impair its vitality and rhythmic action, with the final result of its suppression and arrest. They may be divided into intrinsic and extrinsic, the former applying to the physical heart itself, the latter derived from extrinsic sources. As before said, we simply propose to name them, and among them are found, of the intrinsic malformations, congenital and other malpostions, or as usually called, transposition—ectopia cardis—atrophy and degeneration of the cardiac structure, hypertrophy and dilatation, fatty degeneration, endocarditis, myocarditis, sclerosis, tubercle, tumors, aneurism, angina, stenosis, rupture, persistence of the foramen ovale, or, more properly, inter-auriculare of the fœtal life—a most remarkable instance of which abnormality has just come under our observation in the Metropolitan Hospital, Blackwell's Island—with many other curious and most interesting cadaveric experiences, the patient in the first case having survived nearly three score years, and having presented but few signs pointing to this most rare and unnatural condition, and ultimately succumbing to other causes, and so might go on naming other intrinsic cardiac pathological changes not necessarily involving life. Of the extrinsic, we name the effects upon the heart of shock, mental, emotional, and other valvular depositions and vegetations from rheumatism, gout, pulmonary obstruction, pericarditis and hydropericarditis, gastric, uterine and ovarian reflexes, hemorrhage, depressing effects of the ophidian poisons and those of mineral and vegetable character, virus of hydrophobia, tetanus, eclampsia, imperfection or abstraction of the innervation of the nerve and ganglionic forces—pneumogastric, sympathetic, spinal accessory, from cerebral and spinal diseases, effects of alcoholism, opiomania, morphinomania, asphyxia, and others almost "ad libitum." In view of all this, what a happy man that blessed coroner must be, and how his satellites and adjuncts must revel in the gracious forbearance and easy gullibility of the dear public. Wipe out this foul blot upon the administration of municipal justice, this "dam-ned spot," that will not out as long as coroner and legislative pals and heelers make municipal laws and defile courts of justice, until the very name of justice in the City of New York has become a hissing and a shame.

CLINIQUE.

FOUR CASES OF HERNIA.*

By W. O. Roberts, M.D., Louisville, Ky.,
Professor of Principles and Practice of Surgery and Clinical Surgery in the University of Louisville, etc., etc., Louisville, Ky.

I HAVE recently had four cases of hernia which were operated upon, each of which contains some points of interest.

Case I.—A girl, æt. fifteen years, who had an inguinal hernia of the right side, which had existed since early childhood. She was able to wear a soft truss until eighteen months prior to the time I saw her, when the truss gave her a great deal of discomfort. She did very well with a truss excepting at her menstrual periods, when the pressure caused her to suffer intensely.

Upon examination, I found the greater portion of the hernial tumor could be reduced. There was one portion, however, that could not be reduced, and this was hard and quite sensitive. I suspected from the history of the case that it was likely a hernia of the ovary, and, upon cutting down upon it, I discovered that to be the fact; it was a hernia of the right ovary. The ovary was undersized; it was enucleated, then the sac was removed and the opening closed. She got along without an untoward symptom, but even now she tells me that she has had two menstrual periods since the operation, and at each one there has been some tenderness and dragging sensation about the site of the hernia. There has been no recurrence of the tumor.

This is the second case of hernia of the ovary that has come under my observation. The other like this was an inguinal hernia. The same operation was done upon both patients.

Case II was an inguinal hernia occurring in connection with an undescended testicle. The patient is a young man, twenty-one years of age, and of course the hernia was congenital. The tumor had escaped into the scrotum, and was about the size of a small orange. This patient could wear a truss, but every now and then he would feel the pressure of the truss upon the undescended testicle, and frequently would be laid up in bed for several days because of the orchitis brought about by pressure of the truss.

Cutting down upon the tumor, I found that the sac extended down into the scrotum, with the intestine in it. I did not reduce it purposely before making an incision, and the testicle was not found at first—simply an enterocele. After reducing the bowel and peeling off the sac, the testicle showed itself at the external ring. I caught hold of it and endeavored to pull it down, but could only get it just a little distance beyond the external abdominal ring. The testicle was found to be in a cystic condition. I opened the canal, removed the testicle, and did a radical operation for cure of the hernia. The patient has gotten along without trouble, has had no recurrence, and it has now been four months since the operation was performed.

Case III.—Another patient recently operated upon was a man sixty-five years of age, who had a double hernia. He had never had any trouble in keeping the hernia up by the use of a truss until the day before I saw him, and then the hernia on the right side came down and became strangulated. This patient, so the physician in charge told me, had had for quite a while considerable sugar and albumen in the urine. I did an operation for the radical cure of the hernia. On the fourth day there was a chill and fever. I found that the drainage was defective, and passing a grooved director up and opening a dependent portion of the wound, I removed about a tablespoonful of pus. Immediately afterward the fever subsided, and the man made an uninterrupted recovery. The operation was done four weeks ago; I saw him yesterday and he was up and about, just starting out to take a street car ride. This morning at five o'clock I was called by telephone to come and see the patient, that he was dead. Upon arriving at the house I found that his death was not due to the hernia nor the operation; he had committed suicide by cutting his throat.

Case IV.—The last case was operated upon ten days ago, child eight months old, who had a congenital hernia that was noticed soon after birth. The opening was quite large, and they had been unable to keep the hernia up by means of a truss. A number of trusses had been used for the purpose without success. I did an operation for radical cure in this case, and the patient has gotten along without an untoward symptom, and will be taken home to-morrow.

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* Reported to the Louisville Surgical Society, and stenographically reported for this journal by C. C. Mapes.

DISCUSSION.

Dr. W. C. Dugan: What radical operation have you been performing?

Dr. W. O. Roberts: Except in the congenital cases, I have done the Bassini operation. In the last case I removed a portion of the sac, as I always do in congenital herniæ, and then stitched it over with catgut, then closed up the ring with silk. I would like to ask the members, in discussing the cases, whether they have met with hernia of the ovary, and if so, whether the hernia was inguinal or femoral?

Dr. W. L. Rodman: I have never seen a case like the first one reported, a hernia of the ovary. Dr. Jas. S. Chenoweth reported to this Society an interesting case of the kind. The course pursued by Dr. Roberts in the case of hernia accompanied by an undescended testicle raises a very interesting question, one which has been frequently brought up before, viz., what shall we do with the testicle in such cases? I am satisfied that he pursued the proper plan in removing the testicle. I believe it should be done, not only because it assures a perfect result as far as the hernia is concerned, but I am also of the opinion that the vast majority of these undescended testicles should be removed, for other and good reasons—first, they are always small, imperfect and usually functionless, and in the second place, they are exceedingly prone to undergo sarcomatous change. I have recently encountered a case where there are two undescended testicles—a cryptorchoid. In one of them the testicle has been in the canal, and has been subjected to a great deal of pressure. The patient is a laboring man, and it has undergone repeated attacks of inflammation, and I am quite sure that the testicle has undergone sarcomatous change, and that the tissues all around the testicle have become so infiltrated that it would have been useless to have removed the testicle at the time I saw him. And on account of the fact that these organs are usually small, imperfect and without function, and that they are a perpetual menace to life, I think, as a very general rule, they should be removed.

Dr. H. H. Grant: Like Dr. Rodman, I have had no opportunity to examine or report a case of hernia of the ovary. With respect to the treatment of undescended testicles, I am disposed to view the subject very much as he does, although I think it is still a matter of some question whether or not a certain degree of function does not exist in undescended testicles. There is no positive proof that they have no function, and a number of authorities are of the opinion that they should not be removed if they can be drawn down into the scrotum, returned to the abdominal cavity, or stored away in a safe place, where pressure will not be brought to bear upon them. My experience with conditions of this kind is limited entirely to theory. I have seen a number of such cases, but have not had an occasion to operate upon any of them, and I think if I should have an occasion to operate I would be disposed to bring the testicle down into the scrotum if it could be accomplished. If this could not be accomplished, and there were evidences of normal size, and any indication of probable function, I should endeavor to put it away in the neighborhood of its immediate surroundings, where it would be safe from pressure, and would doubtless afford its owner a chance of function if he should by any accident be deprived of the other testicle.

I am not aware of any positive scientific evidence that these testicles are more prone to undergo sarcomatous degeneration. Dr. Rodman tells us so, but I do not consider it an established fact by any means, and was rather surprised at his positive statement. If there is any such authority, he did not quote it, and I do not believe it is a condition that is more particularly prone to occur in the undescended than in the descended testicle.

In regard to the operation Dr. Roberts speaks of, where he removed the testicle, it seems to me if it were necessary to divide all these tissues, nothing could have been wiser than to close them up after the method of Bassini; although the operation described by Bassini would not have been necessary, because the cord would not have been allowed to remain; it would have been taken away, and the entire canal taken up without making any artificial opening for reception of the cord.

Dr. James S. Chenoweth: I have seen one case of hernia of the ovary, operated upon three years ago. It was an extremely interesting case to me, and I had the patient under observation two years before operation. There was very little difficulty about the diagnosis; a tumor was present for a long time, and it was a femoral hernia, which, I believe, is a very rare variety of hernia of the ovary. The patient was thirty-five years of age, and, as I have said, there had been a tumor for several years. It usually became very tender and was enlarged at the time of her menstrual periods; bleeding was very profuse, and she had considerable ovarian irritation. The tumor, during the menstrual period, and it happened that I was first called during that time, looked very much like an ordinary strangulated hernia; but from the history of the case it seemed very plain what the trouble really was. Throughout the menstrual period a resisting mass could be detected, which did not feel like anything I had ever felt in a hernia. I was unable to reduce this mass perfectly; it seemed to be adherent to the ring. A pad was put over it, which she wore for a considerable length of time. Her husband refused to allow her to submit to any operation for a cure.

About a year afterward the patient came to my office with a decided enlargement in the groin. Upon examination I found she had a hernia of the gut down at the outer side of this ovarian hernia. I reduced this, and cautioned her about straining or anything of this kind that would likely cause it to come down, telling her that it might become strangulated, as she could not wear a truss. She returned home, and the next morning after I had reduced the mass it came down again and became strangulated. I sent her to the Infirmary and operated immediately. She was put upon the operating table, and as she went under the anæsthetic, and the muscles became relaxed, the hernia of the gut slipped back. I cut down upon the enlargement and found the ovary and the extremity of the fallopian tube in the hernial sac. The sac was as large as a hen's egg, and contained probably an ounce of clear fluid. After opening the sac and evacuating this clear serous fluid, the ovary appeared in view; it was very small, and was found with the end of the fallopian tube in the bottom of the hernial sac. The peritoneum and sac were adherent to each other at the ring where the sac came out from the abdominal cavity. A second opening was found toward the outside, where the gut had forced itself down. There was no communication between the sac which contained the ovary and tube, and the hernia of the gut. The ovary was removed and both openings closed, so as to avoid the occurrence of further trouble. The patient made a good recovery, and when last seen there had been no recurrence of the hernia.

The subject of hernia accompanied with undescended testicle is extremely interesting. I operated upon such a case, which Dr. Roberts will remember, at the University Clinic some time since. The patient was a man twenty-three years of age, in perfect health in every way except the hernia, which occurred on the left side, with the testicle in the canal. I saw him five months before the operation. By occupation he was driver of a beer wagon, and in lifting a beer keg off the wagon he had strained himself; there was sudden pain in the groin; he was carried home and put to bed. When I saw him the next day there was quite an enlargement. By means of an aspirator I drew off about four ounces of clear fluid. At that time I could feel the testicle in the canal. Three or four months afterward, he having had no further trouble in the meantime, the mass commenced enlarging, and I found that he had a hernia which had come down behind the testicle, carrying with it a portion of the omentum. He was put upon the table for operation. He did not take chloroform very well, and after opening the sac and freeing the omentum he collapsed under the anæsthetic; he took it very badly and struggled a great deal, became very blue, and I had to stop the operation. I had just gotten the omentum all out of the sac and pushed it back into the abdominal cavity. I then closed the ring without removing the testicle, bringing it down as well in the scrotum as I possibly could, and closed the wound, making provision for drainage at the lower angle I closed the abdominal ring with catgut sutures, endeavoring not to press upon the cord too much. The cord was extremely thick, which would have made it very difficult to close the opening in the abdomen, and any radical operation would have been impossible without removing the testicle or without cutting away most of the cord. But under the force of circumstances I had to complete the operation quickly, to get the patient off the table alive. Twenty-four hours after the operation a great deal of swelling took place in the region of the wound, the scrotum became enormously swollen, and he suffered a great deal of pain. I had to give him chloroform the second time thirty-six hours after the operation, and take out all the stitches, which failed to relieve the tension. I then extended my incision on down to the bottom of the scrotum. It seemed necessary to do this in order to save the scrotum. Sloughing continued and spread over to the other side. I then made another incision down the other side of the scrotum. Thirty-six hours afterward the wound commenced to swell from the outer side of the original incision. I then had to make another incision three or four inches in length, back over the crest of the ilium. The whole incision was now fifteen to eighteen inches long. He finally pulled through; the testicle is still in place and everything adherent around it. Some of the ligatures came away from the stump of omentum through the wound. I shall probably remove the testicle later.

In cases where the cord is thickened in this way, where it is possible the testicle had better be sacrificed and a radical cure performed, as it is almost impossible to close the ring without constricting such a cord.

Dr. W. C. Dugan: [illegible] question as to the first case: I have yet to see my first case of hernia of the ovary. Like the other speakers I have heard of them, but have never met with such a case.

With regard to the undescended testicle: It is certainly a question that is not settled by the authorities as yet. I am rather surprised to hear Dr. Grant state that he did not know undescended testicles were prone to undergo sarcomatous changes; I believe he must have seen such statements by good authorities, and has lost sight of the fact. Several years ago Dr. Marco, of New York, in discussing this subject, stated that they were extremely prone to undergo sarcomatous changes, and McBurney has only recently reported such a case; I do not think the idea traditional by any means. However, I do not think we should treat such cases with any ironclad rule. If we find cases where the testicles have been injured a number of times; where they have been the seat of severe orchitis and the patient is unable to wear a truss, I think the testicle should be removed. But if we operate early in life of the patient, where there is no history of injury or inflammatory trouble in the testicle, I should be very loath to remove it. I am glad to hear Dr. Grant say he would replace the testicle in the abdominal cavity. I have stated before this Society on a number of occasions that I believed this would be the future operation for hernia, in all cases where the consent of patient can be obtained, and especially in all those accompanied by undescended testicle. We all know that is one of the drawbacks to radical operation, that where we leave an opening for the cord we leave a weak wall; that is certainly the greatest trouble in these operations. But where the testicle is removed and the opening closed as Dr. Roberts has described, we have no chance of recurrence of the hernia. Where there is no history of injury or inflammatory trouble, I believe it is better to replace the testicle in the abdominal cavity in those cases where we cannot bring it down into the scrotum. I have removed the testicle in several cases, first securing the consent of the patient.

Concerning the operation where we have congenital hernia, I think the sac should be dissected from cord, tied off as in other cases, etc., cut away, and the cord placed as far from the median line as possible, if necessary making a section of the internal oblique, even extending out as far as the transversalis, so as to place the cord as far from the median line as we possibly can; then make your internal abdominal ring there and bring down the fibers, suturing them to the parts below, then closing up the opening by the Bassini method. There is one vast difference in the Bassini and Halstead—the former restoring the canal and thereby making a valve-like opening, and the latter leaving the cord to pass directly through, yet it has been said the only difference is that Halstead removes the veins, and this makes the cord smaller. I am certainly in favor of removing the testicle in all cases where there is any evidence of injury, or where the patient is unable to wear a truss, or where a truss has been worn against the testicle for years or any length of time, or where there is marked evidence of inflammatory trouble. I am partial to the Bassini, and have been doing it for several years. It is the most simple and by far the most rational of all operations. It meets the two essential factors in the pathology of hernia. First, does away with the depression at the internal abdominal ring; second, restores the canal and leaves what was a weak wall to one unnaturally strong.

Dr. W. L. Rodman: I am glad the discussion took the turn that it did. In the first place, I have had in the last two years rather a remarkable experience with undescended testicles. I am sure I have seen six or eight cases, which is an unusual number for a man seeing the number of patients that I do. Further, I have seen in my limited experience two cases of well-marked sarcomatous disease in undescended testicles. One of them was also seen by Dr. Roberts about two years ago, a remarkable case brought here from Bowling Green. The boy afterward died. The second case I spoke of a few minutes ago.

Now, there is most positive evidence to the effect that the vast majority of patients who have two undescended testicles are sterile. In two cases that I have seen where both testicles were retained in the inguinal canal, while the men were very strong and robust looking persons, there was no evidence to show that they could impregnate a woman. They were both married, their wives being strong, healthy women, yet they were childless. The observations of Curling and others show clearly that a large proportion of cryptorchids and some monorchids are sterile. It also depends to a certain extent where the testicle is. If it is retained in the abdominal cavity, where it is not subjected to pressure, then it will not undergo repeated attacks of inflammation, and is not so liable to sarcomatous change.

The most important question to be considered is what shall we do with the testicles in this class of cases? The only reason I said, when I first spoke, that I would sacrifice the testicle in cases such as Dr. Roberts spoke of, was because it was small, imperfect, and on account of the fact that these testicles are so prone to undergo malignant change. Now, if I encountered a case where I thought the testicle looked reasonably well, and of about the proper size—and I always make it a point to carefully examine the testicle in such cases—I should bring the testicle down into the scrotum if possible; or I would do the operation which is being done by Dr. Dawbarn, *i. e.*, replace the testicle in the abdominal cavity. It is believed by Dr. Dawbarn that this will be the operation of the future, because we thus get rid of the testicle and cord, which should very largely reduce the liability of recurrence of the hernia, and when we have done this we will have made a very decided step forward. Dr. Dawbarn performs the Bassini operation, the only essential difference being that he takes the testicle and wraps the cord around it, then he transplants it, putting it just inside the internal abdominal ring, not, however, in the peritoneal cavity. There is good reason for this, because it has been shown very clearly by experiments upon the lower animals that if the testicle is placed in the abdominal cavity it very soon atrophies, even if it be the normal size when so transplanted.

Dr. W. O. Roberts: Concerning the first case I reported—hernia of the ovary—this form of hernia is quite rare. I find no specific tables on the subject excepting in "Hamilton's Surgery;" he has a collection of eighteen cases. Other authorities I have consulted state as regards treatment if the ovary is found small and degenerated, the proper procedure is to remove it, along with the fallopian tube, and where it is found in a healthy condition to return it and close the opening. In both of my cases the organ was very much undersized—rudimentary.

In regard to undescended testicle: I will state that I have operated upon a great many such cases, and have only found one instance in which I could get the testicle down into the scrotum. That case was operated upon recently, and Dr. Rodman came in at the close of the operation. Both testicles were undescended, only the one on the right side was accompanied by a hernia. In that case I succeeded in getting the testicles down into the scrotum and anchored them there, and also did a radical cure for the hernia. I heard from the case several months after and was told that the operation was so far very successful, that the testicles were still down in the scrotum.

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EVERY SUBSTANCE WHICH, IN LARGE DOSES, ABOLISHES THE PROPERTY OF AN ORGANIC ELEMENT, STIMULATES IT IF GIVEN IN SMALL DOSES.

—*Claude Bernard.*

ASCEPTOLIN.

IS there another new specific ? Has tuberculosis, which according to the report of the State Board of Health, is responsible for 10 per cent. of all the deaths which occur in the State, at last found its master, its death dealing germs themselves struck with death by its potent influence ? Koch aimed at producing this result, and claimed that the long sought specific which was to rid the world of one of the most deadly foes to human life had been found, but the bright anticipations have vanished in the darkness of at least a partial failure. Will Dr. Edson, the new claimant for having at last found the long sought specific, which has heretofore eluded the grasp of the scientists, be any more successful than his predecessor? Whatever may be the logic of his theory and however bright may be his anticipations, the profession have grown wise by experience, and will only crown him with the laurels of the victor, when it has been actually demonstrated he can accomplish what he claims.

Starting from the fact already established by the chemist, that a small amount of phenol is almost always found in the healthy urine of persons fed on a mixed diet, which is always enormously increased during disease, he deduces the opinion that the increased secretion of phenol by the system in disease is one of Nature's devices to cure the underlying condition by this agent, which destroys that germ life whose poison produces disease with all its pathological changes and painful symptoms.

Not satisfied with the results of the chemically pure phenol of Duclat, which in its various combinations enjoys a deserved popularity in the treatment of malarial and respiratory conditions, he sought to obtain it in a form which, when injected hypodermically, would be free from irritating and toxic effects, and yet contain sufficient of the phenol to turn the scale in favor of cure. To accomplish this result the phenol, distilled directly from the hydrate, is subjected to additional distillation, heating the vapor as it passes from the retort to the receiver in an oil jacketed tube and then condensing in a double stoppered receiver, rejecting the first 10 per cent. and utilizing the remainder, except the last 10 per cent. This purified phenol is diluted with distilled water until the percentage of phenol is reduced to 2.75 per cent. Into the receiver into which this is placed a certain proportion of alkaloid pilocarpine is added, so that as the phenol distils over and condenses, it combines with the philocarpine in the production of the fluid.

This fluid, to which the author has given the name of *Aseptolin*, is chemically a pilocarpine-phenol-hydro-oxide, and is given daily in cases of phthisis, hypodermically, preferably in the parietes of the abdomen, in doses of 50 minims, increasing 10 minims every day until a hundred has been reached, at the same time carefully watching the symptoms, and discontinuing if necessary. At the same time, to keep the larynx and bronchi free from infective material, a spray is used once or twice a day, composed of 10 parts of iodoform and 90 parts of ether.

The reason assigned by the author for the combination of pilocarpine with the phenol is that it is not only an expectorant, but it induces leucosytosis and stimulates glandular activity.

It will be seen that Dr. Edson builds his theory upon the combination, in as pure a form as they can be obtained, of two of the most efficient and well-tried remedies in our materia medica. At the request of Calvert, but little over thirty years ago, we introduced phenic acid to the profession and the hospitals in this city, when it was only known through its just beginning English reputation. The startling results obtained from it here and abroad, not only as a disinfectant, but as a germ destroyer in malarial, typhoid, respiratory and infectious diseases, has placed it as one of the most important drugs in the physician's repertory, leading the way to the discovery of that long line of coal-tar preparations, which have by their wonderful beauty and power taken the artistic and medical world by storm. The powerful action of pilocarpine as a gland stimulant, and thereby an eliminator of effete matter, is only just beginning to be understood, but enough of its action is known to give it a high rank in our materia medica.

It remains to be seen, however, whether the action of these powerful drugs, whose separate pathogenesis has been so carefully studied and proved, will, when combined, gives to the world the long sought destroyer of tubercular bacillus. Possibly the combination may develop a power which, like the tempering of the Damascus blade, will render it invincible. We will wait for further proofs, not endorsing or condemning.

But in seeking for a destroyer of the bacillus after it has already commenced its ravages in the system, let us not forget the nose as a germ destroyer and a protector to the lungs. The air is so full of microbes, that, according to Drs. Thompson and Hewlet, from 1,500 to 2,000 micro-organisms are inhaled into the nose every hour. The nose acts as a sterilizer; the mucus it secretes, while it does not kill the microbes, prevents their developing. The danger to life and health arises from the immense power of multiplication of the micro-organisms, and when this is checked by the mucus of the nose, they are swept on by the cillia to the digestive tract, where they meet the common fate of all food which reaches that locality. Keep the nose and stomach in good condition, and you have but little fear of micro-organisms inhaled in the air. All micro-organisms, including tubucular bacillus, require a certain soil to develop and thrive, which soil contains a deficient vital force, produced by some violation of Nature's laws.

IMMORTALITY.

IT is a curious fact that whatever a man may accomplish, his name goes down to posterity, if at all, in connection with some one event or act of his life. Bishop Heber, long after his splendid work as a Bishop had been forgotten, will be remembered as the author of "From Greenland's Icy Mountains," composed in his father-in-law's study on the eve of a missionary meeting. Bret Harte, no matter how much brilliant work he has accomplished, will be forgotten except as the author of the "Heathen Chinee." Dr. Muhlenberg's name will go down to posterity not as the founder of St. Luke's Hospital, but as the author of the hymn which has touched, as with a benediction, so many sad and weary souls, "I Would Not Live Alway." Dr. John W. Francis, whose house was the center of literary, social and scientific culture for many years, once said, in a pleasant chat with his witty companions: "I am sure of immortality. Posterity will not forget me, for as long as men have bowels they will take the triplex pill (of which he was the originator), and will remember John W. Francis."

The Dover powder of Dr. Thomas Dover, has been prescribed by more physicians during the past 200 years than any other medical combination, and is still in popular use. Dr. Dover was born in 1660, and was a B. M. of Cambridge. He was a pupil of Sydenham, and a successful practitioner and author. When Dr. Dover, after a critical study or in a moment of inspiration combined by careful trituration 8 parts of nitrate of potash, 1 of ipecacuana and 1 of opium, the famous *Pulvis Ipecacuana Compositus* or Dover powder was born, linking the name of its author with immortality, as it was carried down through the ages. It occupied a conspicuous place in every drug store and in the repertory of almost every physician. Capt. Thomas Dover, the celebrated buccaneer, the discoverer of Alexander Selkirk (Robinson Crusoe) on his lonely isle, who returned him to his native country, has long since been forgotten, but Thomas Dover, B. M., the friend and pupil of Sydenham, the for a time popular physician and author, still lives after the lapse of nearly 200 years, in his Dover powder.

RAPID DISINFECTION.

THE delay and annoyance of quarantine have been so great in times past that Dr. Doty, the energetic and efficient Health Officer of this port, proposes to inaugurate a new system which will complete the work of disinfection of passengers and steamers in a few hours. In this purpose he proposes to utilize the steamer *Ripple*, which used to carry passengers from Babylon to Fire Island, and which was acquired by the State when Fire Island Beach was purchased for quarantine purposes.

At a cost of $6,000 Dr. Doty finds that he can fit up the *Ripple* with a complete disinfecting plant. The alterations contemplate the erection on the after deck of two series of disrobing rooms, bathrooms and dressing rooms, women's quarters being on the port and men's on the starboard side. Between them is to be erected a chamber for the disinfection of clothing, either by steam or dry heat. When an infected ship comes into port it is intended that, after the removal of the sick, the *Ripple* shall go alongside and take aboard all her passengers and crew.

As fast as received they will be required to disrobe and then pass into the bathrooms, in each of which four persons can be bathed simultaneously. After the bath they will be supplied with wraps and wait in the dressing room until their clothing has been returned to them, after passing through the disinfecting chamber.

After the passengers and crew have undergone the treatment all the ship's bedding will be put through the hot chamber, and while this is being done every part of the ship herself will be disinfected by spraying with a bichloride of mercury solution and sulphur fumes, conducted from tanks and furnaces on board the *Ripple*. Except in the case of the very largest ships, it is believed the process can be completed, and the thoroughly disinfected vessel permitted to proceed in about two hours. The present system of taking passengers to Hoffman Island for disinfection causes a delay of at least one day and often more.

STATE BOARD OF HEALTH.

THE annual report of the State Board of Health states that the bacillus of tuberculosis may find its way into the human system through the medium of milk from infected animals. The danger from the flesh of such animals is practically overcome by the process of cooking, and also because the muscles of animals are often free from disease when the glandular system and even the lungs are markedly tuberculous.

A somewhat careful calculation shows that to destroy all the cattle affected with this disease in the State to-day would involve an expenditure of nearly $1,000,000.

The tremendous importance of this work, the report says, may be fully realized when it is stated that of the deaths occurring in the State during the year, over 10 per cent. were from pulmonary consumption. Hence, it is the unanimous opinion of the Board that that no other question affecting the public health is of such vital importance, and that the Legislature should be urged to make an appropriation liberal enough to prosecute the work of the committee with the utmost vigor.

HOMŒOPATHIC MEDICAL SOCIETY OF THE STATE OF NEW YORK.

THE forty-fifth annual meeting of the State Society commenced at Albany, February 11th, Dr. Jones in the chair. The attendance was small, and the reports and discussion of interest, but not calling for special mention, as in due time they will reach the members through the published transactions. The Committee on the President's Address reported in favor of that portion offering opposition to the bill now pending in the Legislature to allow medical schools and colleges to determine the qualifications necessary for matriculation. Also calling on the Legislature to pass a law prohibiting the Licensing Board from granting licenses to doctors from other States where the standard of examination was not of so high a grade as in this State.

They reported unfavorably on the resolution asking the Legislature to amend the law under which physicians are compelled, when they move from one county to another, to send their diplomas for inspection.

Dr. E. H. Wolcott, of Rochester, was elected President. The fall meeting will be held at Rochester, the date to be announced later.

SERUM CURE FOR THE PLAGUE.

GREAT excitement has been caused in sanitary and medical circles in Japan by the announcement of a celebrated medical specialist, Dr. Kitasto, that he is able to produce a serum capable of arresting the plague in a few hours after having been injected into the veins of the sufferer. Dr. Kitasto also claims to be able to cure diphtheria and cholera, and to neutralize the virus of the lepra bacilli also with the same serum. On account of Dr. Kitasto's great reputation the announcements are believed.

SUPPRESSION OF URINE AFTER ABDOMINAL SECTION.—This condition is by no means of rare occurrence, and unless carefully watched and the conditions promptly met, may end in convulsions and death. Dr. Eugene Bois, in discussing the subject in the "Annals of Gynæcology and Pediatrics," says the amount of urine secreted depends on the relation of the blood pressure within the capillaries of the glomeruli to the pressure within the convoluted tubules and efferent vessels. The amount of urine secreted depends on the fullness of the renal artery and the velocity of the current through the capillaries. Severe or continued contraction of the renal vessels will necessarily cause marked diminution in the quantity of urine secreted or suppressed. Therefore, any factor which causes severe contraction of the renal vessels may cause suppression. Dr. Boise believes the suppression is due to the direct irritation of abdominal vessels by opening the abdomen, aggravated by reflex irritation of the renal plexus by injury to other parts of the abdominal sympathetic, causing contraction of the renal arteries; also to the direct depletion of the blood vessels, thus lowering the pressure by the removal and withholding of fluids, and possibly also to the irritant effect of the anæsthetic. Dr. Boise recommends great care in the use of ether, and seeks to replenish the blood vessels by the free use of hot water by the rectum immediately after the abdominal section. The hot water is rapidly absorbed, and brings the soothing effect of heat in close contact to the renal and solar plexuses, allaying irritation and relaxing the arterial spasm. Among the remedies used to relieve the arterial spasm, codein and nitro-glycerine are considered most effective.

HOW TO AMPUTATE.—The *New York Medical Journal*, of November 16, 1895, contains a valuable article, by Dr. John A. Wyeth, on "How to Amputate" (*Am. Med. Rev.*). He points out that in every amputation the preservation of the life of the patient is the first great principle to bear in mind; the second is to preserve the greatest amount of usefulness for that part of the member which is left with the body. Since hemorrhage is the chief factor of shock, to prevent loss of blood is essential. Practically, every amputation should be governed by these laws.

When hemorrhage has not occurred before the case is in the hands of the surgeon this element of danger may, thanks to modern surgery, be eliminated. There is not an amputation, from the fingers to the shoulder joint, or from the toes to the hip joint, in which hemorrhage cannot be eliminated as a factor of danger to the patient's life. And even when extensive bleeding has occurred before amputation is undertaken, the introduction of hot salt solution into an exposed vein, or in a vein at the bend of the elbow, does much to eliminate the danger of shock from hemorrhage. Beyond the saving of blood and of as much of the limb as possible, says Dr. Wyeth, I have never practised any fixed rules as to how to amputate, even in the formation of flaps. We should make the flap always with a view of saving as much as possible of the limb.

Of the seven hip joint operations performed by his own method, the only patient lost was a young man, about nineteen years of age, with a sarcoma of the knee. Dr. Wyeth says that in Syme's operation he has modified the incision, and now carries it from the tip of the malleolus on either side directly downward, parallel with the axis of the leg. He uses a drainage table through which aseptic irrigation is made every day or two.

In order to secure rapid amputation, Dr. Wyeth, after tying large arteries, passes deep catgut sutures through the masses of muscle. In this way, the muscles are brought together, compression exercised, and bleeding prevented. His last hip-joint amputation, done by the bloodless method, was completed in twenty-five minutes.

EARLY DIAGNOSIS OF CANCER.—In its November issue, the *Therapeutic Gazette* (*Am. Med. Rev.*) alludes to the immense importance of being able to make an early diagnosis of cancer of the cervix, since, when this is done, modern improvements in technique are such as to allow of successfully dealing with a local disease. He states that the diagnostic signs, to obtain the maximum amount of usefulness, must be comparatively easily found when looked for, and their verification must not require any processes which demand a large amount of time and care and special knowledge on the part of the practitioner.

If in any given case under examination the results obtained by palpation and the closest inspection are such as to leave any doubt in the mind of the practitioner as to whether the condition is or is not early cancer of the cervix, the doubt will be invariably cleared up by ascertaining the amount of friability of the tissues. If the suspected portion be thoroughly exposed by a suitable speculum, and the uterus held steady by the volsellum, if the disease is malignant, a firm scrape with a sharp curette or spoon will enable the examiner to obtain a definite, distinct piece of tissue, larger or smaller, according to the extent of the infiltration and consequent friableness of the tissue thus operated upon. If it is not malignant, the firm scrape with the sharp curette will only make the parts bleed, and, at the most, some small, thin, shred or pellicle of semi-translucent epithelium or of granulation will be obtained.

EPILEPSY.—We find in the *Press Medicale* for Jan. 1st an article by Mr. Bexhtereff, of St. Petersburg, giving the details of the treatment of epilepsy by a new method, which has been attended with marked success. He puts of the leaves of *adonis vernalis* about 30 or 40 grains in five ounces and a half of boiling water, filters, and adds from 150 to 170 grains of bromide of potash, from two to three grains of caffeine, and of this mixture gives from four to eight teaspoonsful a day in water or in sweetened milk. With this treatment he claims always to have produced an entire cessation of the attacks, or a diminution in their intensity and frequency.

ACCORDING to reports two large public advertising schemes have gone into the hands of receivers within a short time, viz.: The Columbia Chemical Company, of Washington, D. C., and Harriet Hubbard Ayers' concern, in this city.

An exchange says:

"The eyes of many publishers throughout the country have in imagination been fixed now and then during all the events of the past week on Washington, the late headquarters of the Columbia Chemical Company, whose clever advertising during the past year or more has attracted notice, and whose affairs have been thrown into apparently hopeless ruin."

We commiserate our fellow publishers who may be creditors. The TIMES has no financial interest. Perhaps these events may teach some others to confine their efforts to the profession and keep away from the public.

Physicians are apt to condemn any medical article which is hawked to the public.

TEA cigarettes, instead of tobacco, are becoming a fad among ladies in England, and are calculated to do a vast amount of injury. It is very common in aristocratic circles to see them passed around after dinner, the tea cigarettes to the ladies, and the cigars to the gentlemen. One is about as injurious as the other.

A MOST interesting and animated discussion of the subject of "Vaginal *versus* Abdominal Section" took place recently at the Academy of Medicine, in this city. Dr. W. M. Polk introduced the subject in a short paper. Dr. E. W. Cushing, of Boston, followed with a paper, concluding with views of the various stages of the "vaginal" operation upon the screen. Both disputants stated that they preferred the "vaginal" operation in a majority of cases.

Drs. Daland and Noble, of Philadelphia, who discussed the subject at considerable length, were equally positive that the "abdominal section" was the better method.

Drs. Lusk, Cragin, Boldt, Mundé and Gill Wylie also discussed the subject from various standpoints.

The *consensus* of opinion was certainly in favor of the "vaginal" method, although the advocates of the "abdominal" made a most successful showing.

Dr. Polk made a masterly and intense rejoinder to the debate in behalf of the "vaginal" procedure, in which he said that every speaker had failed to realize the great principle which was involved, viz., our ability by early operation in this way to minimize what would later be a more serious operation.

The meeting, which was the event of the season in the Academy, was followed with the usual collation, and lasted until midnight.

MALARIAL PLASMODIUM.—The claim, freely made, that a correct diagnosis can always be made from a microscopic examination of the blood does not seem to be well founded. Dr. Maynard, of the East Indian service, where the malarial plasmodium would most likely be found, says that in over 120 cases the Laverian organism was found in only 25 per cent. Dr. Crombie, another Indian surgeon, very seldom found the organism, although the blood of malarial patients was submitted over and over again to the most careful examination. The symptoms of malarial persons, as a general thing, so clearly indicate the nature and treatment of the disease, that the microscopic examination casts but little light upon the origin of the disease or the treatment.

CORRECTION.—It is difficult to guard against typographical blunders, however careful the proof-reading, but sometimes the error originates in the editorial sanctum, which is the more vexatious, as the reviewer has no one to blame but himself. In a recent review of a very excellent work on "Diphtheria and its Associates," by Lennox Brown, F. R. C. S., which we had read with pleasure and profit, we found it in the TIMES credited to Lennox B. White, F.R.C.S., editor. We sincerely apologize to the author for an unaccountable blunder on our part.

In the review of Dr. Jacobi's work on "Infancy and Childhood" the substitute of *surgery* for infancy was evidently one of those typographical blunders which so often vex the soul of an editor.

THE JAPANESE ICE BAG. Dr. A. M. Phelps states in *Pediatrics* that he has recently had occasion to examine and use the Japanese paper ice bag, and finds that it fills all the requirements of the rubber bag, in the treatment of joint diseases and acute rheumatism. The rubber ice bag is an expensive, cumbersome and heavy affair. The Japanese ice bag is inexpensive and quite durable, and can be folded up and packed in a physician's valise, ready for use at any time; when in this shape it takes up less room than a thick piece of paper. It is softer, lighter and more agreeable to the skin than rubber.

THE UNION of the Lenox and Astor libraries, with the addition of the Tilden, will give to the public the largest library on this continent, and one of the most valuable in the world. The new organization is exceedingly fortunate in securing as its librarian Dr. John S. Billings, undoubtedly the best bibliographer in this country. His catalogue of the Surgeon General's library of 90,000 volumes, published by Congress, is an evidence of his extensive information and the thoroughness of his work. Next to an exhaustive library gathered under one roof is its classification, so that any desired subject can be reached, and this, under the direction of Dr. Billings, will be obtained in the New York Public Library.

TWO bills are now before the Legislature in this State, in which not only our own profession, but the whole State have a marked interest. One is the appointment by the State, or by judicial authority, of experts, who are called upon to testify in cases where life or death may hang upon the testimony of a medical-scientific expert. The other abolishes the office of coroner, restoring his judicial duties to the legal system of the State, abolishing coroners' juries, and making the examiners purely medical officers.

BIBLIOGRAPHICAL.

Second Annual Report upon the Births, Marriages, Divorces and Deaths in the State of Maine for the year ending December 31, 1893. Augusta, Me., 1895; Registrar of Vital Statistics of the State.

Dr. W. R. Hayden has issued a little brochure covering the "History of Anæsthesia and Painless Surgery," in which he recognizes the debt of gratitude due the discoverer of anæsthesia, the late Dr. Morton. The Massachusetts General Hospital, Boston, will celebrate the semi-centennial of this discovery on October 16th next, with demonstrations suited to the occasion.

Dr. G. Frank Lydston, of Chicago, has in preparation a book of doctor's stories called "The Tales of a Talkative Doctor," to contain humorous and pathetic sketches. The contents will comprise:

Character sketches from real life; psychological studies; satire of current medical follies; dialect stories and everyday medical philosophy gleaned from the life of a busy doctor, together with the "Rhodomontades of a Sociable Skull."

A Manual of Medical Jurisprudence and Toxicology. By Henry C. Chanman, M. D., Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia; Member of the College of Physicians of Philadelphia; of the Academy of Natural Sciences of Philadelphia; of the American Philosophical Society and of the Zoological Society of Philadelphia. Second edition, revised, with fifty-five illustrations and three plates in colors. Philadelphia: W. B. Saunders, 1896; pp. 254, octavo. Price, $1.50.

As the title indicates, this is a book adapted to the medical student especially, and may be of great service to the practitioner as well, as the text covers, in a concise and lucid manner, brought together by a master hand, a medical man—who alone can best appreciate the needs of the practical physician—the more salient points absolutely required in this department. We have no hesitation in saying that it is the best book of its class for the undergraduate that we know of.

Wood's Medical Hand Atlas of Nervous Diseases. By Dr. C. Jacobi. Translated and edited by Joseph Collins, M.D. New York: William Wood & Co.

We cannot better give the scope of this atlas of nervous diseases than in the language of the author in the preface. "I have endeavored," he says, "to portray an important chapter of medicine, which usually remains for the majority of students and physicians of all classes foreign and unenjoyable. It has been my idea to make easy of comprehension for students the clinical picture as seen at the bedside and the processes on which it depends, and, at the same time, to make it possible for the practical physician, who has heretofore stood aloof from this subject, to understand the meaning of the most important recently developed facts of neurology. To this end I have made the freest use of illustrations."

These illustrations are of great beauty and accuracy, and can easily be studied in detail by the help of the letter press on the opposite page.

Section I. is devoted to the Morphology of the Nervous System, and is illustrated with ten plates.

Section II. Development and Structure of the Nervous System, illustrated by thirty-seven plates.

Section III. Anatomy and Physiology of the More Important Nerve Tracts, with three plates.

Section IV. General Pathology and Therapeutics of the Diseases of the Nervous System, with fifteen plates.

The admirable manner in which both the plates and text are arranged will make the manual a very acceptable addition to every medical library.

An Eclectic Compendium of the Practice of Medicine. By Lyman Wakins, M.D. Cincinnati: John M. Scudder's Sons, 1895.

The theory of specific medication, so emphatically taught by the Eclectic school, is so apt to be misunderstood that the author states in his preface the interpretation of his school, as adapting the treatment to the symptoms. "We divide," he says, "the force of morbid conditions and meet each separate manifestation with a remedy. As the symptoms vary, the indicated remedies will also be varied; and thus in our philosophy there is no special remedy specific for the cure of any special disease. It is evident that, in order to be specific in the administration of remedies, it is essential that a very close observation of the symptoms of disease should be made, and that specific diagnosis must go hand in hand with specific medication; as our remedies are varied to suit the many different phases presented by morbid states, we must be on the alert to detect these phases and by study learn to apply the particular specific indicated by them." The compendium, in clear and concise language, gives a very excellent and suggestive repertory of the specific remedies indicated in the treatment of disease.

A Pictorial Atlas of Skin Diseases and Syphilitic Affections, in photo-lithochromos from models in the museum of the Saint Louis Hospital, Paris, with explanatory wood cuts and text. Edited and annotated by J. J. Pringle, M.B., F.R.C.P. To be published in twelve parts, at $3.00 a part. Sold by subscription. Philadelphia: W. B. Saunders, publisher, 1896.

The new pictorial atlas of skin diseases is issued by the authority and with the aid of the staff of the Saint Louis Hospital, Paris, including Ernest Besnier, A. Fournier, Tinnesir, Hallopean, Du Castel and others, and is a reproduction of celebrated casts in the museum, including those of morbid conditions of the skin, by Baretta, the most complete in detail, and life like, which have ever been produced. The diagrams, wood cuts and photo-lithochromos are as accurate as science and art can make them, and the letter press descriptions from the hands of the physicians who treated the models, including such men as Besnier and Fournier, add such additional value to the work, as to make it the most complete text-book on the subjects treated yet published. An atlas so complete in all its detail, cannot fail of a large circulation.

COLOR-VISION AND COLOR-BLINDNESS. A practical manual for railroad surgeons. By J. Ellis Jennings, M.D. (Univ. Penn.), formerly Clinical Assistant Royal London Ophthalmic Hospital (Moorfields); Lecturer on Opthalmoscopy and Chief of the Eye Clinic in the Beaumont Hospital Medical College; Ophthalmic and Aural Surgeon to the St. Louis Mullanphy and Methodist Deaconess Hospitals; Consulting Oculist to the Missouri, Kansas and Texas Railway system; Fellow of the British Laryngological and Rhinological Association; Secretary of the St. Louis Medical Society. Illustrated with one colored full-page plate and twenty-one photo-engravings. Crown octavo, 110 pages. Cloth, $1.00 net. Philadelphia: the F. A. Davis Co., publishers, 1914 and 1916 Cherry street.

Within the past few years the attention of pathologists has been specially directed to color blindness, which has been so frequently noticed in engineers, who in their work are guided by the color of signal lights. The author has produced a practical work, which contains all that is essential to a perfect understanding of the subject. In it he discusses the physiological anatomy of the retina, physics of light, theories of color perception and color blindness, methods for detecting color blindness, Pennsylvania Railroad instructions for the examination of employes as to vision, color-blindness and hearing, description of Oliver's series of tests for the detection and determination of subnormal color perception, etc.

TWENTIETH CENTURY PRACTICE. In twenty volumes. Vol. VI., Diseases of the Respiratory Organs. William Wood & Co., 1896.

Owing to unforseen difficulties, it has been found necessary to issue Volume VI. out of its order. Volume V. will be the next volume to appear.

Among the contributors to this volume we notice the names of Professor James, of London, on Diseases of the Nose; E. I. Mourc, M.D., of Bordeaux, on Diseases of the Naso-Pharanx, Pharynx and Tonsils; Diseases of the Ear, by Albert I. Buck, M.D.; Frank H. Bosworth, M.D., on Diseases of the Larynx; Diseases of the Trachea and Bronchial Tubes, by Sir Thomas Granger 'Stewart and George A. Gibson; Diseases of the Lungs, by Winston Anderson: M.D., San Francisco; Diseases of the Accessory Sinuses of the Nose, by Jonathan Wright, M.D. All of tne authors stand at the head of their specialties, and their subjects are discussed from a thoroughly practical and scientific standpoint, giving the results of late investigations so far as they are substantiated by facts.

THE YEAR BOOK OF TREATMENT FOR 1896. A Critical Review for Practitioners of Medicine and Surgery. 12mo., 484 pp., cloth, $1.50. Philadelphia; Lea Brothers & Co., publishers, 1896.

The summary of the year's advances in all departments of medicine is presented in a clear but concise form, and so classified as to be ready for quick reference. The volume closes with a classified list of the best new books, a section of medical instruments and surgical appliances; pharmaceutical and dietetic novelties and a carefully prepared index.

THE January and February issues of *Littel's Living Age*, notwithstanding the reduction of the price from $8.00 to $6.00 a year, shows no reduction in the amount and quality of the literary feast furnished. The articles are given not in abstract or quotation, but entire, as originally published, and include the very best selections from the periodical literature of the world which could be made.

THE PRINCIPLES OF SURGERY. By N. Senn, M. D., LL.D. Philadelphia: F. A. Davis Publishing Co.

In the second edition of this valuable work the literature of surgery is brought up to the present time, and includes the most useful points of recent investigatiors. Much new matter has been added, including about fifty illustrations. All of the writings of Dr. Senn are characterized by clearness of expression which impresses the meaning of the author strongly upon the mind.

CORRESPONDENCE.

AN OPEN LETTER.

Dear Doctor: I very earnestly desire to know the comparative frequency of the healthy rectum and of the unhealthy rectum after the operation which is known as the American operation, and also after other operations which remove the mucous membrane in its entire circumference at the anus. I wish to determine as accurately as possible the percentage of failures and the percentage of successes, and can only arrive at such a conclusion by collecting as many reports as possible from medical men. In replying to this letter, will you kindly say, if reporting failures, what is the condition of the rectum at this time, or, if the case is not under your immediate observation, at the time when last seen or heard from by you? If there have been no cases which have come into your own experience and yet of which you know accurately, will you please give the patient's initials and place of residence, that I may thus avoid the danger of twice, or oftener, reporting the same case.

I think it is our duty, without enthusiasm and without bias, to judge of the value of any surgical procedure by the results which attend its employment, and sincerely hope that I may have your thorough co-operation in these efforts. I have the honor to be,

Very sincerely yours,
THOMAS CHARLES MARTIN.

Cleveland, O., Dec. 27, 1895.

THE USE OF BUFFALO LITHIA WATER IN THE CLINIQUE.

To the Editors of the NEW YORK MEDICAL TIMES:

I want to state to your readers some of my experience with Buffalo Lithia Water, covering a period of more than thirty years, since my first visit to those now far-famed springs. Each year of my professional life I have used these waters more and more extensively, finding their virtues applicable to a wider range of diseases.

I am thoroughly convinced of the correctness of the views expressed so well by Dr. Hunter McGuire in the following words, when speaking of the waters of Buffalo Lithia Springs: "I know from constant use of it personally, and in my practice, that the results obtained from its use are far beyond those which would be warranted by the analysis given. I am of the opinion that it either contains some wonderful remedial agent, as yet undiscovered by medical science, as its elements are so delicately combined in Nature's laboratory that they defy the utmost skill of the chemist to solve the secret of their power."

I have often,and repeatedly prescribed the various preparations of lithia and potash, but am thoroughly convinced that the results obtained from the pure Buffalo Lithia Water are far superior.

I have frequently heard Prof. Wm. T. Howard declare, before his class in the University of Maryland, that he had seen more and greater benefit derived from the use of Buffalo Lithia Water, than from any other known mineral water.

Buffalo Lithia Water, Spring No. 1, is unexcelled as an appetizer and promoter of digestion, in all forms of dispeptic trouble affecting the whole, or any part of the alimentary tract.

Physicians and patients all testify to its virtues as a powerful restorative of the broken down or enfeebled system, whether resulting from over work, worry or disease. It acts directly in producing a better quality of blood, and invigorating and toning up the nervous system generally. Its aphrodisiac properties are very distinctly shown in many cases each year.

As an alkaline diuretic and heart tonic, it has proved most efficacious and certain.

In the various forms of lithæmia it is especially effective and happy in its action.

Hepatic disorders, whether of gouty or malarial origin, and attended with jaundice or biliary calculi, yield to the action of this water like magic.

In many cases of diabetes I have seen most gratifying results from its use.

Diseases peculiar to women, amenorrhœa, menorrhagia, dysmenorrhœa, are each regulated and adjusted in a wonderful degree by these waters. Especially is this the case with young and anæmic girls just merging into womanhood.

Gout, rheumatism, and all uric acid troubles, are markedly relieved by both Nos. 1 and 2 Buffalo Lithia Water. I have now under treatment a most interesting case of "senile or gouty heart," in which my patient is comparatively comfortable, and often able to attend to large business interests, so long as he is fully under the influence of these waters, but to suspend their use for even one day, so intensifies all of his symptoms of failing circulation, as to utterly prostrate him.

As a solvent and eliminator of phosphatic or uric acid gravel these waters have never failed me. I have often placed gravel in the fresh water, and to hasten the disintegrating process, changed the water a few times, when the gravel would first become "honey combed," and then break down into fine sand. It is this action on large stones in the kidney, bladder or gall-bladder that causes the continued outpouring of small particles, so often, for days or weeks, with the ultimate complete relief of all those distressing symptoms from which the poor sufferer has so long complained, and sought relief in vain from "many physicians." Under the influence of Buffalo Lithia Water No. 2, I knew a patient to pass sixty-eight calculi in one day, following an attack of nephritic colic. Another patient (a lady) after a severe attack of hepatic colic passed ten gall stones in one night, at once experiencing entire relief from most distressing symptoms, from which she had suffered for months.

Cystitis and urethritis, simple or gonorrhœal, often yield to the healing influence of these waters at once, when other and standard remedies have failed completely.

Bright's disease, in every stage and form, is benefited by these waters. In many cases large amounts of albumen, epithelium, hyaline and granular casts entirely disappeared from the urine, while in those whose kidneys are too far gone to hope for permanent benefit, all those distressing symptoms are ameliorated in an astonishing degree.

In nephritis following scarlet fever, the action of these waters is equally gratifying. I invariably put my scarlet fever patients on Buffalo Lithia Water as soon as the disease is suspected, and have yet to see any kidney trouble follow where this has been done.

In the nausea and vomiting, ureamic poisoning and albuminuria of pregnancy, I know of nothing to compare with Buffalo Lithia Water. So uniformly gratifying has been my experience with this agent, that it has long been my habit to prescribe it as a prophylactic, as well as most potent remedy through all the stages of gestation.

The water of spring No. 3 is used in connection with that of both Nos. 1 and 2, wherever there are indications of the need of iron, and especially in those anæmic subjects where a laxative effect is also desired.

My object in this letter is to lead my professional colleagues to think of this agent in cases where they have not before used it, with the belief that the experience will accord with my own, which covers so many years.

Fraternally yours, E. C. LAIRD, M.D.

Haw River, N. C., Feb. 7, 1896.

Note.—We heartily concur in what Dr. Laird states from his immense experience, and there is no doubt that these waters should be prescribed more than they are, as they are Nature's restoratives.

The claims of these waters are submitted upon a record of results testified to by most eminent medical authority, which will bear investigation. It is now so many years that these agents have been prescribed by the profession, and their effects are so well-known, that it is only necessary to remind our readers of the increasing field of their usefulness, and that their purity is still maintained. Col. Goode certainly deserves the thanks of the profession for enabling them to possess such wonderful therapeutic means.—EDS.

To the Editors of the NEW YORK MEDICAL TIMES:

To-day I received a number of the MEDICAL TIMES, for which I am thankful. I think I should acknowledge its receipt. I have read it very carefully. I am especially well pleased with it. This number was very entertaining to me, more so than any medical journal I have read for a long time. "Psychology of the Unconscious," by David Allan Gorton, M. D., of Brooklyn, N. Y., fascinated me more than "Trilby." It is the most entertaining article that has fallen under my eyes. I wish I could shake his hand and congratulate him. I like his style, his subject and the way he handled it. I have heard of people falling in love at first sight. I have not seen him, but have fallen in love with him. I wish I had his picture. I would like to read "The Monism of Man." I lectured to a large class of medical students on "Physiology and the Nervous System" for several years. He has shed a flood of light and happiness on these and kindred subjects. Can't you let him know how well he has pleased one reader so far away in the West? I was highly pleased, too, in reading about "The Universal Ether." "Expectoration" is a good and timely article. It is well written up. I can't specify all the good things in this most excellent number. How many have written to you since you sent out many samples that they were pleased? If you ever come west, and come to our city, call on me, and I will drive you around behind a three-minute stepper and show you the sights. Wouldn't you like to see the sun set in golden splendor west of the Missouri river?

Don't suspect too strongly that Indians standing on the Eastern bank of this great river still look with wonder at the King of Day as he passes out of sight behind the hills on the other side.

I used to see them with their crude medicinal agents for curing disease and mitigating pain. Long since they went away, some over into the immortal hunting grounds, some moved farther west.

While they were here I saw them one day tie a rheumatic Indian to a log and press little splinters of wood, greased, around his swollen ankle and knees, and set them on fire. When the fire would reach the skin and blister it, he would cry out aloud with pain. This was one of their ways of curing rheumatism.

What do you think of it? The change is great and magical since then. Beautiful houses in a beautiful city are now here. Fine school houses, churches and hospitals are to be seen.

Well dressed, sensible, courteous and cultured doctors give the sick every advantage they could have in New York.

There are two well-equipped medical colleges here at the present time, and no prejudices. All is as pleasant as a summer's day.

Operations for appendicitis are as common as grapes in the fall season, and doctors relish them much more. This letter seems to suppose that you doctors may not know much of the things so far away. If it is so, it might also suggest that you have some lively correspondent out this way. If you are not interested in reading this letter I know you will forgive me for writing it, because of my intention to do good. Respectfully,

St. Joseph, Mo., Feb. 13, 1896. F. A. SIMMONS.

APROPOS of your recent articles on spitting in public places, you will be interested to learn that for several months, perhaps a year or more, the cars of the Rochester Railway Company (electric street railway) have had posted in two or more prominent places in each car, the following notice:

SPITTING on the floor of this car positively prohibited.

I rarely see the prohibition disregarded, though I have never seen any attempt to call attention to it by the men in charge of the several cars. But Rochester is a pretty civilized, intelligent sort of a place, as cities go.

Yours very truly,

H. K. PHINNEY.

University of Rochester, Rochester, N. Y., Feb. 20, 1896.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

ACADEMY OF MEDICINE.

Contagion by Books.—M. Du Cazal: Can books, as is declared, convey the germs of contagious diseases, and what are the diseases that can be transmitted by them? To elucidate these points, MM. Cazal and Calvin have experimented with the streptococcus, pneumococcus, diphtheria, tuberculosis and typhoid fever. Animals were killed by injections of a bouillon in which there were fragments of paper that had been previously soaked in different morbid products, viz., the pus of streptococci, of pneumococci, diphtheritic false membranes, etc. There is real danger in handling, then, books that had remained in the hands of patients affected with contagious diseases, and so it becomes a matter of importance to disinfect such books as thoroughly as possible. To effect this, MM. Cazal and Catrin employed the process of vaporization of formaldehyde, as advised by Lehmann and Miquel, and also the passage through a stove. The latter method is preferable, because it is more simple, and the result more certain.

Pott's Dorso-Lumbar Disease. Triple Abscess by Congestion.—Dr. Jonesco, Bucharest, reported the case of a patient of nineteen years, affected since the age of four with Pott's disease; suffered much pain, with gibbosity, etc. Four months previously two gluteal abscesses made their appearance. On entering the hospital there were three large abscesses freely communicating with each other, one in each thigh, and a third in front of the sacrum, pressing forcibly upon the posterior surface of the rectum. Incision of 15 c.m. for evacuation of the abscess of the right side, and 10 for the left, evacuation of the pus, curettage with Volkmann's curette, suture of wound, Mickuliez's drainage, trepanning of sacrum, cleansing and scraping of the presacral pocket, drainage. Incisions healed by first intention; cure complete on twelfth day; presacral pocket disappeared, and two months later sacral wound healed.

Treatment of Painful Talipes Valgus. Club Foot.— M. Berger, after reading the report of an observation by M. Kirmisson relative to talipes valgus, treated by Ogston's operation, draws from this fact and others similar, the following conclusions: Given the operation of Ogston, it may be asked whether the osseous suture or the extirpation is to be preferred. Without denying that the latter is a more delicate operation to perform than the suture, and that the thread may be broken, as happened to M. Kirmisson, M. Berger prefers the bone to the metallic thread, which he has seen cause painful exostoses. Other operations than those of Ogston have been proposed to remedy inveterate painful valgus; that is to say, in the third degree of what Gosselin calls the tarsalgia of adolescents. Trendelenburg has proposed to practise a supra-bilateral-malleolar osteotomy; but this method produces the formation of an angular callus at the lower extremity of the leg. The results have been, some good, others bad, and this operation is in reality inferior to that of Ogston. Since, after the last operation, the arch of the foot remains anchylosed, Richard Davy and Golding Bird have thought, that instead of cutting away the scaphoid and astragalus, it would suffice to remove the first of these bones. This operation, though as laborious as that of Ogston, gives less favorable results. At the Twenty-second Congress of German Surgeons, Gleich, of Vienna, while not undertaking to combat the valgus element of the affection, but to restore the concavity of the foot, proposed to lower the posterior part of the calcaneum. The results obtained, comprising the elongation of the limb, are not sufficiently advantageous to cause the abandonment of Ogston's method, which continues to be the procedure of preference in the third period of the tarsalgia of adolescents. It continues to be agreed that the first period exclusively justifies the adoption of soothing remedies, such as rest in bed, shoes suitable to re-establish the plantar arch, massage, etc.

Osteomyelitis of the Femur. Necrosis of the Shaft and Part of the Epiphyses. Cure.—M. Diard, Sonne: Case of a man healthy up to 1879, when he contracted a blennorhagia. During the years following, he had incontinence and retention of urine. In 1884 a general infection occurred, showing itself by general symptoms, viz: iritis; numerous abscesses of the right thigh, with necrosis of the femur, and the elimination of small sequestra from diaphysis and epiphyses. The treatment consisted in perfect rest, the injection of the tincture of iodine into the abcesses, and tonic remedies generally. In 1890, nine years after the beginning of the troubles, the bone was reconstructed, and so solidly that the patient could undertake hard labor. Dr. Diard urged the following points. 1. That the blennorhagia was capable alone of explaining the general infection. 2. The persistence of the osteomyelitis during nine years. 3. The cure without operation. 4. The new formation of the femur, permitting walking and working.

ACADEMY OF SCIENCES.

The Origin of the Argon and Helium in the Gases Disengaged from Certain Sulphurous Waters.—MM. Troost and Ouvard investigated the gases dissolved in the water of the Seine and the sea which runs through the soil and that which remains upon the surface, in order to elucidate the question whether the argon and the helium of sulphurous waters proceed exclusively from the atmosphere. They decided that the spectra furnished by the gas from the springs of Cauterets were distinctly different from those of the gas extracted from Seine water and sea water. These last gave the spectrum of argon and scarcely perceptible traces, and often doubtful, of the spectrum of helium, while the gas received from Raillere, or extracts by boiling the water from the same source, gave, very distinctly, the characteristic rays of argon and of helium, and the gas from the springs of Bois showed especially those of helium. The helium contained in the gas disengaged from the mineral waters of Cauteret, proceeds then probably from the rocks in the earth that the mineral waters have traversed. M. Bouchard remarked that if the argon and the helium are inert from a therapeutic point of view, it is not the same perhaps with the mineral substances with which they are in combination. It is the metal, and not the gas, which exercises a physiological action upon the economy.

Mechanism of Muscular Contraction.—M. A. Imbert: Since 1878 M. d'Arsonval, in speaking of the experiments of M. Lippmann, mentioned the phenomena due to the superficial tension of liquids, in order to explain the changes of form and the electric modifications of muscles during their contraction. He has thus been able to refer to the same cause the contraction of protoplasm, and the negative oscillation and the discharge of electric fishes. By the adoption of these views, and by pursuing the deductions arising from them, I have been led, says M. Imbert, to the establishment of the mode by which the functional operations are performed, of the smooth and the striated fibers of muscles and the very characteristic differences due to the construction of the fibers themselves; differences, moreover, which are in direct relation with the dispositions presented by the two forms of fibers.

and the nature of the effects produced by their contraction.

M. d'Arsonval: The consequences of the electro-capillary theory, which I have sustained for nearly twenty years, are numerous. I insist upon the following especially, to wit, that this theory explains why the contraction of the striated fiber is much more rapid and more energetic than that of the smooth fiber. In effect, this difference results from the structure peculiar to these two kinds of muscular fiber. In the striated fiber, the contractile protoplasmic matter is divided infinitely by the striation. The surface of contact, as respects volume, is enormous, and consequently the variations or superficial tension are rapid and multiplied. It is entirely otherwise with the cell constituting the smooth fiber. In this last, the surface,. as respects volume, is feeble, and hence the slowness and feebleness of contraction. The division of the protoplasmic matter is an artifice employed by Nature to augment electro-capillary effects, and for the same reason we find the same process applied to the construction of the electric organ of fishes.

SURGICAL SOCIETY.

Fever Consecutive Upon Hemorrhages Into Serous Membranes.—Apropos of an observation of M. Peyrot, in which he remarked that in a case in which he removed the spleen that had been perforated by a ball from a revolver, there had been a thermic elevation without septic phenomena, M. Quenu asked if there had been no hemorrhage, to which a reply was given in the negative. MM. Reynier, Pozzi, Quenu and Bazy reported intra-serous hemorrhages (peritoneum, pleura, and synovial) that were followed by thermic elevation, without there being any septic condition whatever of the escaped fluids. Many opinions were advanced to explain the pathogenesis of this curious phenomenon. M. Pozzi thought it was due to a toxic reabsorption of the necrobiosed blood, and M. Quenu ascribed it to a simple reflex action, due to the sensibility of the serous membranes. M. Lucas Championniere said it was one of the forms of traumatic fever that he had before described, but M. Michaux was not at all convinced of the non-specificity of the effusion, and remarked that it was sometimes necessary to leave the culture tubes in a stove for fifteen days before the cultures made their appearance, and, consequently, as far as he was concerned, an elevation of temperature was always an operative indication.

Flapless Amputations.—M. Moty, of Lille, observed at Tonkin amputations of the wrist, made for the purpose of mutilation by the Annamite pirates, in which the stump was well cicatrized without flaps. Without saying that flaps were not necessary, M. Moty thought the fact no less interesting to report; M. Pozzi also observed during the war an analogous fact of an amputation of the arm made at a single blow, that healed perfectly.

Pneumotomy.—M. Tuffier repeated the different objections that had been made to his method of pleural decollation and replied to them. Certainly, the facts upon which he relied, and the cases in which he had applied his method, were not very numerous, and never will be, for they are those in which there are no pleuro-pulmonary adhesions; nevertheless, the good results which both he and M. Quénu have obtained, enable him to affirm that this method may be useful, and he felicitated himself upon having indicated to surgeons this new mode of pulmonary exploration, which offers always the great advantage of avoiding the pneumo-thorax, so dangerous in incisions of the pleura. Dr. Ricard said, as respects deep thoracic suppurations that necessitate pneumotomy, a minute medical examination should be made in the first instance of the diseased locality. Then an aspiratory puncture, and in case of the failure of this method, recourse should be had to an extensive pulmonary incision, after costal resection. All surgeons are agreed upon these points, but the disagreement begins with the subsequent treatment. Dr. Tuffier proposed pleural stripping, and so explore the lung. Is this useful or not? Dr. Ricard believed that it would be better, without losing time, to open the pleural cavity and incise the lung. In a recent case in which he had operated, and despite distinct auscultation signs, by which Dr. Dieulafoy had diagnosed a pulmonary abscess, the parenchyma, upon incision, appeared to be healthy, and at a depth of not more than seven centimetres, and, with the thermo-cautery, he found a purulent collection, by the guidance of his finger introduced into the wound. The patient recovered. Dr. Bazy made numerous cadaveric experiments in order to prove the inutility and impracticability of the operation proposed by Tuffier, for examining the lung through the decollated pleura. The decollation is very difficult, and cannot serve to discover the slightest induration, nor the smallest foreign body in the lung, even when situated at two centimetres from the surface of the parenchyma. The decollated pleura presents itself to the hand as a tense concave membrane, giving no hold to the fingers. The method proposed by Tuffier is not new, but is only a simple process of the same kind as described in the Surgical Congress for examining the lung by introducing the hand into the pleural cavity. The total pneumo-thorax, so much dreaded by Tuffier, is not as dangerous as he believes it to be, and it is useless to invent new operative methods to avoid it. Dr. Quenu was of opinion that in this question of pulmonary intervention facts are yet wanting to enable us to form useful conclusions. No mode of investigation should be neglected, and the method proposed by Tuffier may have its indications and its utility, for the fear of pneumo-thorax is not imaginary. Certainly it is proved that the medical means of observation are not sufficient to exactly localize the lesions, though they may indicate the area for intervention. After making a large costal resection, the lung may be at once explored through the decollated pleura, and if this process yields nothing, recourse can then be had to incision and a subsequent pulmonary examination. As respects pneumo-thorax, M. Quenu insists upon the necessity of observing how the patient breathes. If the respiration is tranquil, pneumo-thorax will be but slightly developed, and the lung will remain in contact with the thoracic wall. But if the respiration should be spasmodic and irregular, then pneumo-thorax will be rapidly developed. Finally the cases in which there are adhesions or not will be different. Dr. Michaux, without stopping to inquire whether it is better to examine the lung directly or through the pleura, thought it more interesting and important to know how the lung could support direct explorations in its interior. Like Ricard, he had had occasion largely to incise the lung with the thermo-cautery, and explore its interior with the finger passed through the incision. The lung bore the explorations very well, and for two months he had the opportunity of examining the cicatrization of a pulmonary wound left without dressing. He recommends then, in order to discover purulent collections undiscoverable by other methods, to incise the lung largely, to pass the finger into the wound, and to plunge the trocar in different directions. Dr. Delome recalled the fact that pneumo-thorax is especially distressing by causing congestion of the heart and of the lung that results from it, and that the best method of overcoming that complication is to arrest the return of the venous blood to the heart by four ligatures put upon the limbs, and practising venesection.

BIOLOGICAL SOCIETY.

Influence of Intellectual Work Upon Respiration and Arterial and Capillary Circulation.—M. Binet: Short, but intense intellectual work—a mathematical calculation, for example—determines notable modifications of respiration and circulation. While the attention is fixed, respiration is less free, more superficial and more rapid. Near the end of the work the arterial circulation indicates an increase in the rapidity of the cardiac contractions, which continues some time after the cessation of the work. At the beginning, on the contrary, there is an augmentation of the force of the contractions, and a diminution of the pulsations. In fine, the capillary pulse denotes an increase in the pulsations, characterized upon the chart by extensive oscillations at the beginning of the work, while towards the end the rapidity of the pulsations diminishes, and the height of the oscillations becomes depressed in consequence of the capillary vaso-constriction.

MM. Gley and Charrin exhibited two rabbits, whose parents were inoculated with pyocyanic cultures. They were first inoculated and afterward injected with toxines. Two of the surviving young presented malformations of the ears and osseous deformities. This fact is important, in view of the heredity of malformations. M. Charrin remarked that these malformations resembled those of syphilis, which tended to prove that the specific character of the hereditary lesions of syphilis had without doubt been exaggerated.

M. Nomrecourt investigated at the maternity the influence of disease in the mother upon the nutrition of the child, and proved that the antecedent existence of toxines in the blood of the mother lessened very much the appetite of the child.

M. Arthur showed crystals of oxyhemoglobine, visible to the naked eye, and obtained by precipitating very slowly by alcohol the aqueous solution of oxyhemoglobine.

M. Mossè observed a case of acromegalia in which there co-existed a voluminous tumor of the pituitary body, hypertrophy of the thyroid and of the thymus. Injections of thyroid liquor produced a marked amelioration. M. Mossè insisted upon the fact of the simultaneous lesion of three closed glands.

M. Marinesco presented a patient affected with diabetes, and who had ptosis of the left eyelid, complete paralysis of the ocular-motor communis, and left hemiparesis. This is a type of the affection known as the syndroma of Weber, and due to a lesion of the "protuberantia annularis."

How Changed are the Times!—The discovery of the migration of the taenia has given to science a fruitful idea. At last one can see that the knowledge of worms is of utility to the hygienist. The future must charge itself soon with demonstrating this truth in the most forcible manner. In every country discoveries multiply. A series of diseases, hitherto unknown, have made their appearance upon the medical scene.

Others, of whose cause we are ignorant, are ascribed to worms. Ankylostoma, discovered at Milan in 1840, is no more a mere curiosity. Observe how its role has enlarged, and of what pathogenic importance it has become. It is that which causes the chlorosis of Egypt, the anæmia of miners, and which, during the tunnelling of Saint-Gothard, killed thousands of workmen. In India, Lewis found worms in the blood, a curious discovery paralleled by analogous verminous observations in France by Delafond, in the blood of the dog. The same are found in Brazil, and, more than this, grown worms are discovered in the lymphatic vessels of the arm, of which the others are the embryos. In China, an English physician, Manson, discovered the singular fact that the mosquito, on stinging a man, swallowed the embryos, and that these last are at once evolved into the condition of larvæ in the body of the insect, afterwards fall into water at the same time with the latter and from thence penetrate by occasion the digestive tube of man. We will cite a few examples —the whole list would be too long. A professor of the veterinary school of Pisa, Rivolta, found in the liver of the rabbit an organic parasite that lodged in the biliary canals. A celebrated German naturalist, Leuckhart, recognized that this organism represented a new zoologic type, which he designated by the name of "coccidie." Another zoologist, as well-known, Balbiani, of the College of France, made a masterly study of this parasite. He elucidated its structure, its processes of reproduction and dissemination, and so by one stroke medicine is enriched by a capital discovery. Since these memorable works, the coccidies and the psorospermose have held their places in clinical medicine and pathological anatomy. The certain observation of Gubler at the "Hopital Beaujon," in 1858, would undoubtedly have remained unexplained if Balbiani had not detected the coccidie in the liver of the rabbit. Researches of this nature, accomplished in the silence of the laboratory, have more influence upon the general progress of medicine than all the theories, however seductive, that do not rest upon scientific knowledge or absolute and precise experimentation. Helminthology, or rather parasitology, to empioy a more comprehensive expression, has already begun to enlighten medicine; the results obtained even now are as various as they are unexpected. It is not difficult to foresee that there are yet important discoveries in reserve, a number of which bear an immediate relation to medicine, inasmuch as each one of them affords valuable knowledge of prophylaxis and hygiene. Studies of this kind require special knowledge, which the physician does not possess at all. He should have profound instruction in natural history; it is necessary to know not only the parasites of the human kind, but to be a professional zoologist. All this does not come to him spontaneously, but must be the result of long and legitimate study.

M. Morau studied heredity in white mice that were attacked with a peculiar and inoculable form of epithelial tumor, and found that one-half of the progeny of these animals did not reach full term, and that among the rest there were numerous and evident traces of rachitism and various malformations. M. Charrin presented a communication from MM. Cadéac and Bournay upon the passage of micro-organisms through the digestive tube of the ox. Owing to the anatomical structure, it is easy to understand that the intestinal canal of the bovides retains the bacilli of Koch, which are harmless, but on feeding a bull on hay mixed with dessicated tubercular portions of pulmonary structure, they found virulent Koch's bacilli in the fæcal matter. M. Garnault explained the operative procedure in removing the stapes and completely separating it from the hypertrophied mucous membrane of the middle ear. About one-half of the cases of deafness may be cured or ameliorated by this method. M. Roger successfully inoculated the gallinaceæ with the tuberculosis of the mammiferæ in the proportion of one-tenth of the subjects experimented upon. M. Kalt made a communication upon the diffusion of microbes in the ulcerated cornea. The gonococcus facilitates the passage of the staphylococcus and the two microbes are found associated.

M. Ranvier made an important communication upon the structure of the lymphatic glands. He discovered in the mesentery of the pig, that the vessels surrounding the gland, form on contact, veritable cavernous bodies. As respects the glands themselves, their follicles are situated in a reticulated tissue which is not separated from them. There is no perifollicular capsule, and an injection of soluble Prussian blue, thrown indifferently into the gland, at once penetrated the follicles and the surrounding reticulated tissue. M. Chauveau presented a case of idiocy in a child of six years, suddenly becoming cachectic, with bloated face and other symptoms of myxœdema. Treatment with the thyroid body of the sheep, produced a rapid disappearance of all the symptoms of the myxœdema, without any amelioration of the idiocy.

M. Artaud communicated a number of observations of tuberculosis of animals, respecting the influences of this disease upon their offspring. He observed sterility and malformation among the descendants so frequently as to establish the hereditary acquisition of these characteristics.

M. Marinesco presented an example of polyneuritis in which there existed a certain number of lesions of the cells of the anterior cornua of the medulla, due to the propagation to the medulla of peripheric neurites. M. Dejerine reported an observation of primitive sclerosis of the lateral cords of the medulla, manifesting itself during life by a spasmodic paralysis of the four limbs. Autopsy showed the existence of a symmetrical sclerosis limited to the lateral columns, and presenting its maximum of intensity in the dorsal region.

ARGENTINE MEDICAL SOCIETY.

Treatment of Fractures by Massage.—Translated from the *Semana Medica.* M. Degoud: For more than six months, all the cases of fracture coming to my surgical service have been treated, from the first day, by massage, and I am able to declare the results good and satisfactory. The treatment was applied to fractures of both upper and lower limbs. It is well-known that fractures of the humerus are very painful, and that they produce a large number of pseudarthroses. Thanks to massage, the pain notably diminishes, or is completely stopped. The imm bility of a special apparatus is not necessary, and pseudarthroses are exceptional. In the case of a soldier of the "Corps des Invalides," he fell from his horse and fractured the arm at the point of union of the superior third with the middle third of the humerus. At the point of fracture, movable fragments of the humerus could easily be felt, and the pain was very great. Massage was begun the day after the accident by Dr. Guillermo Wagner, and pain ceased at once. A simple bandage was applied to support the arm during the interval between the applications of massage, this being sufficient in cases of fracture of the middle and lower thirds. In this case, as in those of Lucas Championniere, there was rapid consolidation. Massage is never painful when skillfully applied; it always simplifies the treatment of fractures, and I consider it superior to all others. .

A New Process of Nephropexia.—Dr. Brian, of Lyons, experimented upon a dog with a new method of nephropexia without suturing the kidney or irritating the capsule, after the method of Tuffier. His experiments have demonstrated to him that the capsule of the kidney, when exposed, and covered with a simple antiseptic dressing, will proliferate, and adhesions between it and the parietes will soon be formed. It would be interesting to see this method applied to man, for it is certain that however harmless the threads of catgut, when applied to the renal parenchyma, may be, it would be very much better to do without them altogether.

Treatment of "Flatfoot," "Piedplat."—According to Dr. A. Hoffa, Prof. of Surgery in the Medical Faculty of Wurtzbourg, flatfoot is caused particularly by a defect in the resistance of the metatarsal bones, due to a softened condition, a species of rachitism of these bones, and also to a weakness of the muscles that unite to give to the plantar arch its solidity; viz., the muscles of the calf of the leg.

The treatment of this anomalous condition should have reference to the consolidation of the bones, and the strengthening of the muscles in question. To meet the first indication our *confrere* prescribes the remedies habitually used in the treatment of rachitism, such as cod liver oil, phosphorated, and arsenic in the form of pills. To give strength to the muscles he has recourse to energetic massage of the sole of the foot and the leg, and recommends a series of gymnastic exercises, comprehending the following alternate movements of flexion and extension of the toes while in the erect position. The feet being parallel to each other, lifting the body upon the points of the feet, elevation and depression of the heels in the erect position, placing the feet so that the toes touch each other, with the heels as far apart as possible. While the feet are in this last position, the patient should execute the following movements: Lift the heels, bend the knees, extend the knees, depress the heels and so repeat. To strengthen the supinator muscles, make movements of adduction and abduction of the foot, with the exercises of standing and walking, keeping the internal side of the foot elevated as much as possible. The patient should also accustom himself to more active walking, taking care not to allow the foot to rest upou the whole plantar surface, but to apply it to the ground, first on the heel, then on the rest of the foot, keeping the feet parallel. Finally, a shoe should be worn with a metallic sole on its interior surface, made of bronzed aluminum, and moulded or fitted to the plantar surface, reaching from the heel to the extremities of the toes, and so arranged as to form an inclined plane, and at the same time support the internal side of the foot. When the flatness of the foot is not excessive, and there exists no immobility of it in a deformed position, requiring forcible reduction, M. Hoffer obtains very excellent results by the means above described. The pains disappear, the patient is able to walk easily, and the plantar arch is more or less perfectly reconstructed.

Suffering of the Fœtus During Parturition.—Dr. Demelin, Chief of Obstetrical Clinique of the Faculty of Paris thus concludes an article published by the *Journal des Praticiens*, in which he investigates the proofs of the suffering of the fœtus during parturition. He asks: "What is to be done when the fœtus suffers?" Nothing is more simple, at least theoretically. It is necessary to terminate delivery as soon as possible.

If dilatation is complete, there is nothing to hinder; it must be the forceps or version, according to circumstances. But if the cervix is imperfectly dilated, it will be necessary, before extracting the fœtus, to practise a preliminary operation, which is the artificial dilatation of the orifice. For this the balloon of Champetier de Ribes may be employed, or the separator of Tarnier, and when the orifice is sufficiently large, deliver the child. An important point is to proceed during the extraction promptly, but without violence or reckless precipitation, for if the fœtus resists asphaxia well, it is still sensitive to injury. Life may be restored more easily and surely after slow and gentle manipulation than when the interference is rude and violent.

Diagnosis of Uterine Diseases From the Nature and Quality of the Discharges.—According to Mish, the different vaginal discharges, the time they appear and their odor and quality, enable a precise diagnosis to be made. He distinguishes the following varieties, the characters of which he considers pathognomonic. (1) Profuse leucorrhœa, odor specially fetid, granula, irritating to the genitals, appearing during menses, and in the intervals, accompanied by profuse hemorrhages, cancer of the cervix. (2) Leucorrhœa with hemorrhage, containing matter similar to the sebaceous matter of the vulva, sarcoma of the uterus. (3) Watery discharges, similar to the menstrual, without odor or very slight, persistent, accompanied by profuse hemorrhages, fibroma; slight hemorrhages, polypus. (4) Abundant sanguineous discharges, coincident with the menopause, and during the interval of the menses, fibroma. (5) very abundant loss of blood, occurring suddenly after the menopause, cancer. (6) Slight leucorrhœa, offensive but not fetid, with hemorrhage, cancer of the body of the womb. The very great importance of an early and precise diagnosis, in order to give to the patients the appropriate care so urgent in their eases, and to institute from the beginning of the diseases, induces M. Mish to think that it would be useful as well as interesting to physicians to appreciate the value of the primitive symptoms of these various diseases.

Treatment of Granular Ophthalmia With the Sulphate of Copper and Massage.—Dr. Prokopenko is very successful in the treatment of the above disease, by associating the old and familiar remedy, the sulphate of copper, with a preliminary massage, the object of which is to give activity to the circulation and to nutrition. The massage is practiced by means of a glass rod with a round end, which is applied vigorously to the internal surface of the lids, and the portion of the cornea that is affected by the disease. This done, a solution of copper is freely applied, not only to the granulations, but to the whole palpebral mucous membrane. For five years that our Russian confrere has employed this method, he has almost, without exception, obtained cures in which there were neither cicatrices nor retractions, and within the space of a few weeks.

Female Surgeons and the Royal College of Surgeons of London.—There is in London a special college of medicine for women, and they are beginning to occupy prominent consideration as female physicians. Many are at the head of the medical hospital services, and also the surgical and obstetric, and, stimulated by their success, those who are surgeons are striving to secure the title of Member of the Royal College of Surgeons, but they have not as yet succeeded, and their admission remains, for the present, forbidden. The *British Medical Journal* has recently published a long and earnest plea in their favor. The author of the article first considers the arguments that have been presented to the Society against their admission. Women, it is said, may obtain the diploma of the University of London, and consequently have the right to practise medicine. Let that suffice. They have no aptitude for scientific work, and have produced nothing in this direction, and it may be especially argued that if they become members of a scientific body, they might be able to reach even the presidency, and eminent London surgeons might behold with terror the possibility of their scientific sessions being directed by a petticoat. But all these reasons avail nothing, according to the *Journal*. In the first place, the incapacity of women is far from being demonstrated by facts; the contrary is indeed the case. In effect, during the last year, the school of medicine for women received, in proportion to the number of its pupils, the majority of diplomas from the London University, and by the report of M. Clement Lucas himself, one of its eminent professors, the female examinations were not inferior to those of the male candidates. The hospital services directed by women were very efficiently conducted. Madame Scharlieb, of the New Hospital for Women, made thirty-six laparotomies with only two failures, at the Battersea Maternity Charity. Seven thousand deliveries and all the necessary obstetrical operations, were practiced by women, and only nine deaths occurred all explicable, and not due to any fault of the operation. Where then, we ask, is their incapacity, and as to the reproach of their never having yet produced any work of scientific importance, can that be reckoned as a crime? 'Tis true that women have not furnished the amount of work that has been done by men; their minds are turned more in the direction of practical than theoretical work. One may be a great lawyer and a good physician without having published anything, and they should rather be felicitated on not having contributed to the increase of the number of the compilations and repetitions that are annually published. It seems, then, that the royal colleges cannot much longer interdict an entrance to them to women; the feeble majority which prevented them on the last occasion demonstrates that fact. Moreover, are they not their colleagues in the British Medical Corporation, of which they already form a part, and to which they were unanimously admitted?"

Treatment of Infantile Diarrhœa.—The most important anti-diarrhœic remedies are opium, astringents, intestinal antiseptics and inert powders. Opium is extremely active in children, hence its action must be watched. Dr. Simon, who has a predilection for this therapeutic agent, advises that as many drops of the laudanum of Sydenham should be given in twenty-four hours as the child counts years, viz., half a drop for six months, a drop for a year, etc. It is indicated in apyretic, non-infectious diarrhœa, and particularly in lientery and chronic diarrhœa, tubercular for example. It diminishes the gastro-intestinal secretions, and produces a paresis of the intestinal muscular layers. Astringents, especially tannin and the vegetable, should be administered in mild forms of diarrhœa, or in the graver forms, as adjuvants of other means, tannin, 10 to 30 centigrams, extract of ratanh, 50 c. g. to 3 grammes, cachou 4 to 20 grammes of the tincture, colombo, guarana, etc., constitute, with the perchloride of iron, which should never be associated with tannin, the principal astringents; the nitrate of silver, by injection, 50 c. g. to 100 grammes of water that has been boiled, for lesions of the large intestine. Inert powders play a large part in the therapeutics of infantile diarrhœa; their employment is convenient, exempt from danger, and very efficacious. Bismuth, in the form of the subnitrate and the salicylate, occupies the first rank; it acts as an antacid and absorbent, destroys the excessive acidity of the gastric and intestinal secretions; absorbs the gas, which enters largely into the production of diarrhœa. The sulphuretted hydrogen transforms it into the sulphuret of bismuth, producing black discoloration of the stools. The principal successors to bismuth are lime and its salts, lime water 10 to 60 grammes; phosphates, acid or tribasic, are especially employed. Among the intestinal antiseptics, lactic acid should occupy the first place, and, according to Hayem, is particularly efficacious in the green diarrhœa of children. It seems to render the intestinal contents inimical to the development of the bacillus of this diarrhœa. In infectious diarrhœas, accompanied with fever, calomel acts as a purgative and an antiseptic; it evacuates the intestines, and opposes the development of microbes. The most important of the other antiseptics are betol, salol, benzonaphtol, of which 50 c. g. may be given to a child of one year. Naphthaline is recommended by Bougers in the dose of 25 c. g. daily. Associated with washing out of the rectum, the same for the stomach, with boiled water, borated water, vichy, salt water, has given very remarkable results to Prof. Grancher. By this method the digestive tube is mechanically cleansed of the foreign substances and toxic elements it contains. When the diarrhœa is only a symptom, more or less important, of a generally infected or dyscrasic condition, it is evident that the efforts of the physician should tend, above all, to combat this condition, by the use of the sulphate of quinine for malaria, mercurials and iodide of potash for hereditary syphilis, etc. Finally, in the diarrhœas of children, as of adults, there should be considered an uremic diarrhœa, due to the elimination of toxic substances in the organism, as a result of renal insufficiency. M. R. Drews, of Edinburgh, has employed tannigen in infantile diarrhœas; he obtains from it excellent results, and considers it as having an astringent, antiputrid and antibacterial action, and another important fact, it does not disturb the functions of the stomach. He gives it in the dose of 0 gr. 30 to 0 gr. 05, according to the age, repeated three or four times daily. M. de Buck, of Gaud, also makes a therapeutic study of tannigen in the *Belgigue Medicale*. This body is the diacetylic derivative of tannion. Its formula is $(C_{14} H_8 (C H_3 C O_2) O_3)$, and it was first discovered and employed by H. Meyer, of Marbourg. It produces no gastric irritation, saponifies in the intestine, is absorbed and eliminated in the urine in the form of gallic acid, is a very active astringent and promotes constipation. It has neither odor nor taste, and hence is easily administered in milk, acts on all diarrhœas except those of nervous origin, and M. Buck concludes that it is a promptly curative remedy in acute inflammatory conditions of the intestine. The dose administered by Meyer, Moller and Kunkler varies from 0 gr. 10 to 1 gr., three or four times daily. Salophene or the salicylate of acetylparamido phenol or acetylparamido salol, is a salicylic ether of acetylparamido phenol. M. Huot has made a complete study of this new remedy, and considers it a remarkable substitute for the salicylate of soda; is not irritating to the stomach, nor occasions nervous troubles, and has the same antirheumatic action. He advises its use in chorea, and cites two cases of cure; also useful in neuralgia and migraine. Dose, 3 to 4 grs. in twenty-four hours. Being insipid, is easily administered in tablets; it passes through the stomach without decomposition, and is changed in the intestines into salicylic acid and acetylparamidol.

M. Stoos recommends bromoform and antispasmine in whooping-cough. The former diminishes the frequency of the attacks, but does not appear to shorten the duration of the malady. The antispasmine, which is a mixed compound of salicylate of soda and narceine, is more easily sustained by young children than bromoform, and gives the same results. M. Schmitz prescribes napthaline for the oxyuris vermicularis which so frequently distresses children, causing intestinal and serious nervous troubles. He gives, for two days, four or five doses of 0 gr. 15 to 0 gr. 40 of naphthaline between the taking of food. This may be repeated after an interval of from eight to fourteen days. M. Liscia has experimented at the Hospital of Livourne upon the action of the sulfoichthyolate of ammonium in suppuration. With this body he dresses scrofulous ulcers, phlegmons, incised adeno-phlegmons, varicose ulcers and different forms of abscesses, and gives it the preference over iodoform, of which it has not the repulsive odor, and its employment is also absolutely harmless. J. A. C.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Acetanilid in the Treatment of Chancroids.—Dr. Thomas K. Morton is reported as saying in the *Philadelphia Polyclinc* that upon "chancroids the effect of acetanilid is most surprising." He states that all soft venereal sores (chancroids) and inflammations "have uniformly healed in from one to seven days, with a single exception," which one was of a phagedenic nature, and required cauterization with nitric acid before it would heal under the acetanilid." He prescribes a drachm of powdered acetanilid. The patient is to wash several times daily, and then rub in the dry powder. If the sore is beneath the prepuce, leave a quantity of the drug inside, which prevents excoriations by urethral discharges. The drug is entirely devoid of odor.

Elevation of the Pelvis as a Cure for Nocturnal Enuresis.—Stumpf, in the *Munch. Med. Woch.* for June 11, 1895, gives an account of a simple and apparently rational expedient which he has successfully adopted in the treatment of nocturnal enuresis, especially in older children (*Bost. M. & S. Jour.*). His theory is that during sleep the spinchter of the bladder is apt to become relaxed, so that as the child lies horizontally in the bed a little urine passes the sphincter and enters the deep urethra. The irritation of this urine causes at once strong reflex action of the detrusor, and the bladder is at once emptied in a full, strong stream. On order to prevent this occurrence during sleep a simple expedient is adopted, namely, the elevation of the pelvis, so that an accumulation of urine of ordinary amount in the bladder will gravitate back and distend the fundus, and not press against and tend to pass the sphincter. The elevation is secured by allowing the child only a single, small, flat pillow under the head, and placing one or two ordinary pillows under the thighs, so that they lie at an angle of 130 to 150 degrees with the horizontal spine. This method was entirely successful in fourteen cases, some of them inveterate. It was usually necessary to continue the treatment for three weeks, after which time the children were able to return to their former sleeping position without relapsing.

Management of Typhoid Fever.—The *Philadelphia Polyclinic* replies as follows to some inquiries by a correspondent, with regard to Dr. John E. Woodbridge's method of aborting enteric fevers, which was described in our columns some months ago:

" In so far as the treatment referred to makes use of the well-known principles of cleanliness and antisepsis, it is safe, though it is not the best method of applying this principle. In so far as it ignors the lessons of experience, concerning rest, concerning the management of the bowel, concerning temperature, concerning hygiene in general, it is dangerous, and in cases of true typhoid fever will sometimes prove deadly. The larger proportion of patients subjected to it have hitherto escaped because they have not had typhoid fever; another large proportion because the tendency of typhoid fever is to recovery even despite errors in treatment. In general, *the simpler the treatment in typhoid fever the better*; *the less number of drugs given, the better*; *the less quantity of whatever single drug will answer the purpose that is taken, the better*; *the more closely Nature is followed, and the more cautiously rash interference is shunned, the better.* Judged by all the canons of science and of art, the treatment concerning which our correspondent inquires, is treatment to be avoided by the careful physician."

And—judged by the rules we have emphasized above—may not the *ideal* treatment (or the nearest possible approach to it) be that of an intelligent, non-bigoted use of symptomatology?

Argonin in the Treatment of Gonorrhœa.—In the *Centralblatt f. Chirurgie* for December 21st there is an abstract of an article on the use of argonin argentum-casein in the treatment of gonorrhœa, by Dr. J. Jadassohn, published in the *Archiv f. Dermatologie und Syphilis*, XXXII., 1, 2. What we must strive to accomplish, says the writer, is to kill the pathogenic germs as early as possible, without doing unnecessary damage to the mucous membrane. Hitherto the most trustworthy agents for this purpose have been weak solutions of silver nitrate (1 to from 3,000 to 4,000), ichthyol and argentamine. The writer has employed argonin in a great number of cases of gonorrhœa, both in men and in women, since Meyer's investigations showed that it was less irritating than silver nitrate and argentamine, and that in strong solutions it killed the gonococci promptly, and he has been led to the following conclusions: 1. Both experimental and clinical investigations have shown that argonin kills the gonococci in a short time, notwithstanding its lack of albumin-coagulating power. Thus far it has been mostly used in solutions of from 1½ to 2 per cent. 2. Even in stronger solutions it has hardly any tendency to set up inflammation and no caustic properties, so that it is particularly suitable for use in the treatment of acute gonorrhœa in men, whether affecting the penile or the deep urethra, and of gonorrhœas of either the urethra or the uterus in women. 3. It seems destitute of astringent properties, and on that account purely anti-catarrhal treatment should accompany its use.

Treatment of Ether Collapse.—Schilling (*Munich Med. Woch.*, Sept. 17, 1895) reports that in the treatment of collapse from ether, hypodermic injections of camphor are very effective. The author advises the employment of larger doses than recommended in text-books. As much as one grain of camphor may be employed. Half-grain doses are quite effective, but the results following the injection of one grain are astonishing and gratifying.

The solution of camphor should be one part of camphor to ten parts of olive oil. Large doses of camphor are well borne, and produce no ill effects. The camphor is eliminated within two hours, and hence has no cumulative effect.

RETROSPECTIVE DIETETICS.

Oriental Medicinal Food.—Dr. Wm. E. S. Fales, ex-Acting United States Consul, Amoy, China, contributes some interesting and instructive observations on this subject to the *Dietetic and Hygienic Gazette*, May, 1895. The Far East, he says, has practically no knowledge of chemistry, physiology and other kindred sciences; nevertheless, it has long had an extensive practical knowledge of the treatment of disease by medicinal and medicated foods, and of the action of a vast array of substances upon the different vital functions. The Chinese are especially expert in this direction. So far as can be learned, the knowledge has been acquired by slow experience, and has not been derived from more intellectual or more scientific communities. There are references to the topic, there are instructions upon the treatment of various maladies through the assimilative process, as far back as 1000 B. C., a time when Europe and even Italy and Greece were sunk in the densest barbarism. It is interesting to compare the empirical system of China with the scientific theory and practice of our own race. The result shows that the Oriental, working patiently and laboriously along the lines of induction, has arrived at nearly the same results as the Occidental through general science and deduction.

Thus from time immemorial Chinese physicians have recommended the use of the pepsin bearing portions of the pig's stomach in the preparation of food for people troubled with ordinary indigestion or dyspepsia. They have gone even further, and have shown that they understand in a rude way the nature of the operation they advise. Their formula is that the meat and the tripe shall be cut with a sharp knife as thin as possible, so as to expose the largest amount of water surface of animal tissue to the chemical and mechanical action of the cooking, that the heat shall be moderate, and the digestion in the pot as long and protracted as possible. One old writer recommends digesting or cooking meat in this manner for three or four days, remarking that at the end of that time the meat will have become converted into a rich and benevolent soup, in which will be found floating spongy masses of solid matter, which should be carefully strained out before the fluid is given to the patient. He also recommends the addition of a little lime juice, or lemon juice, and better still, of some aromatic vinegar, to facilitate the cooking of the food, and also the improvement of the patient's stomach. This is just about as accurate a description of the manufacture of a peptone as could be given by an intelligent human being without any scientific knowledge of chemistry or of physiology. This knowledge of what we are pleased to call artificial digestion runs largely through all Chinese cooking.

I have often, out of curiosity, examined the numerous made dishes of the Mongolian cuisine, with a view to ascertaining their constitution. Whether it was soups or stews, ragouts or fricassees, pot roasts or boiled, I have found tripe finely shredded or thinly sliced in three dishes out of five. The ratio was largest in houses of wealth, where well-paid cooks were the rule, and smallest in those where the conditions were otherwise. As they discovered the peptic virtue of tripe in all food animals, they likewise found the same quality in the gizzard of the bird kingdom. They have employed the gizzard even more liberally in their cooking than they have the tripe, and regard it, as is the scientific truth, as the most valuable of all animal tissues. This offers a curious contrast with our own experience, because it is only within the last twenty-five years that modern chemistry has found the gizzard to contain the digestive principle known as ingluvin, which is as strong a digestive ferment as pepsin, but which contains or possesses a much more comprehensive action. Even up to to-day we have but few preparations in the market which contain ingluvin, and no preparation which contains ingluvinated tissues or proteids.

In the employment of the gizzard in cooking, the Chinese chef treats it in much the same way as he does tripe. He uses it in the dish direct, and not in the sauce. In the case of illness he makes a very palatable and exceedingly nutritious compound, by digesting over a slow fire for many hours the feet of chickens and ducks, the flesh and the sliced gizzards. The ingluvin does not act exactly as pepsin does. It softens the flesh and aids the warm water in converting the digital cartilages into gelatin. This preparation is about the best I have ever seen. When skillfully made it is yellowish brown in color, and so thick and gelatinous as to turn to jelly when allowed to grow cold. Unlike a jelly, however, which is always more or less insipid, it has the full flavor of the chicken or duck, and also a large amount of the meat in a pasty and easily assimilated condition. In cases of weakness or exhaustion it is a great restorative. When administered to children is is usually diluted.

The malting principle or diastase is similarly utilized by the Oriental. He applies it to rice and millet flour until these are converted into sugar, and then boils down the solution until it becomes the famous Canton syrup. This is used all over the East as both a medicine and a food or sauce. It is almost white, and has a curious semi-empyreumatic flavor that is very pleasant, and prevents the cloying sensation of a purely saccharine fluid. The same operation is applied to other flours with similar results. Chestnut flour, when half digested, is extremely palatable. Potato flour is almost indistinguishable from the glucose and grape sugar made in the United States. Sweet potato flour has a warmish and suggestive rather than aromatic flavor. Bean and pea flours have a flat and rather insipid taste, but are said to be of value in nervous disorders.

The star of all these products is obtained from almond flour, whether half malted or converted into syrup. The familiar peach-kernel flavor remains, and makes it exceedingly agreeable in whatever form it is used.

On one occasion I watched a Chinese physician making a tea or broth for a person troubled with a severe laryngitis. The ingredients which he employed comprised poppy leaves, crushed almonds, bean sprouts, ginseng, dried peach pits, dried pumpkin seeds and Canton syrup. It was cooked over a slow fire for about four hours. I do not know if ginseng contains any curative principle, but the other ingredients would be an improvement upon many well-known pectoral cough syrups.

The Chinese are much wiser than ourselves in regard to flour. Strictly speaking, we make but two—wheat and buckwheat. Maize, oats and barley, we convert into meal but not into flour, and there we stop. The Chinese millers make flours out of wheat, oats, rye, barley, buckwheat, millet, potato, sweet potato, chestnuts peanuts, beans, peas, lentils, pulse, rice, almonds and fifty other vegetable substances. This offers a variety unknown to our own civilization, which often enables the physician to nourish a patient who does not care for food. It also enables him to give different qualities to teas, broths and stews. Thus, for example, the flour from pumpkin seeds, melon seeds and watermelon seeds makes a rich mucilage, which besides containing pectin and colloid starch, also contains 10 per cent. of albuminoids. The flour from almonds, peach pits and cherry pits, contains a hydrocyaniferous essentialoil which has a very pleasant flavor and savor, and acts medicinally as a nervine and antispasmodic.

A form of beef, iron and wine is made by mincing meat into a paste, letting this digest cold in strong wine in closed bottles for thirty days and then filtering off the fluid. This preparation contains many of the albuminoids which are precipitated when any heat is employed in making the ordinary preparations, and approaches Valentine's extract.

Ginger is another favorite remedy of the Chinese physician, and a favorite ingredient of the Chinese cook. It is used in more forms than with us. All of them are admirable, and could be profitably adopted by our own people. The pickled ginger undergoes a great change in its preparation. It becomes a dark crimson or maroon in color. It loses its bite, but retains its flavor unimpaired. It can be eaten by a small child without any danger or even unpleasant consequences. The preserved pickled ginger is made by stewing the pickled ginger in honey or in syrup, and is very delicious. Even in these two mild forms it is a good stomachic and carminative. In cases of light indigestion, as well as where there is loss of appetite or weak digestion, half an ounce of ginger is used in flavoring the broth or stew for the patient. The root is removed from the dish just before it is served, the oil, essential oil, and flavor being all that is deemed advisable by the medical faculty. It is also employed as a corrective ingredient with stewed fruits and vegetables of an aperient character. Its use is so general that it is in the stock of the smallest store in every part of the great empire.

Another class of foods which are very common in the Far East are the chutneys. They are familiar to us from one variety, which comes to our market in the form of a rich and highly-flavored fruit preserve. This, however, is merely one example of one class, and does not give any idea of the subject as a whole. The general notion of a chutney is an accessory or side dish of fruits and vegetables, spices, and lime or lemon juice. There can be any amount of variation as far as fruits, vegetables or spices are concerned, but the acid element must be always present. The favorite combinations in making chutney are with the mango, the mangosteen, the peach, pear, tamarind, cherry and apricot. Any two or three of these stewed together until the pectin they contain begins to become jelly, and then mixed with lime juice and sweetened to suit the taste, make a good chutney. It is extremely pleasant in itself; it is pleasanter as a sauce to meats, and it makes a good dessert when served with rice, bread or biscuit. It is aperient, anti-scorbutic and antifebrile in character. It is not greatly used in the northern parts of China, but is found everywhere in the South, in both China and India.

Our practice in employing fine charcoal for sour stomachs finds its counterpart in the East, where they toast cold boiled rice until the surface is charred. It is just as efficient as our method and much more palatable. Our use of menthol has its parallel in the Orient, where the oil of peppermint is applied externally for headache, coryza, neuralgia and rheumatism, or as an antiseptic for wounds, abrasions or burns, internally for gastric and intestinal disorders, and as an ingredient in teas and broths for serious colds, coughs and kindred ailments.

If space permitted it would be easy to add a hundred other illustrations of the essential similarity of the practices of the East and the West, but the few given will suffice to show that the long centuries have taught them in a blind way much that we have recently learned from the discoveries of our most advanced sciences.

A member of the Malaprop family gave an excuse for changing her medical practice, on the ground that the Homœopaths are good for infant-ry, and the regulars are best for adult-ry, and her trouble was in the latter direction.

MISCELLANY.

—The proposed memorial to the late Sir Andrew Clark has failed.

—The death rate in Denver, Col., the past year was 11.15 per 1,000.

—As arms are longer than tongues, so our deeds should exceed our speech.

—Gelsemium controls pain in the ovaries better than anything else except narcotics.

—There are people who never accomplish anything because they undertake too much.

—There is only one real failure in life possible; and that is not to be true to the best one knows.

—A sudden decline in temperature during typhoid fever is a warning of hemorrhage from the bowels.

—Sir Henry Thompson has received a legacy of $500,000 from a grateful patient. The heirs are contesting the will.

– The census taken last April by the Board of Health, shows that New York City has 10,942 more women than men.

—The State Legislature has authorized the Post Graduate School and Hospital of this city to receive the sum of $30,000 annually.

—By a decision of the Supreme Court of Michigan, the Homœopathic College of the State University will be moved to Detroit.

—Two football deaths are reported in the daily papers, George Butterworth, of Rochdale, Scotland, and Samuel Steelfox, of Shamokin, Pa.

—Stockholm has the largest death roll from alcoholism of any city in the world. Ninety in 1,000 die from the excessive use of intoxicants.

—Union College, at its recent centennial commencement, conferred the degree of LL.D. on Surgeon-General Tryon, United States Navy.

—The medical department of the navy consists of 175 when its ranks are filled. There are at this time fourteen vacancies, and few applications.

The report of the Paris Health Department shows a decrease of 65 per cent. in the death rate of diphtheria since the introduction of antitoxine.

—The Japanese surgeons during the war employed as a a dressing for wounds the ash of rice, the carbonate of potash in the ash making it antiseptic.

—Tancereaux says that the cough occurring so often in hepatic persons, with tickling sensation in the throat, is calmed by quinine in one or two grain doses.

—Sir Joseph Lister has been elected President of the British Association for the Advancement of Science, which is to hold its next meeting in Liverpool.

—A competitive examination for the position of assistant surgeon in the United States Marine Hospital Service was held at Washington on the 10th of February.

—The *South African Press* advertises that there is a good opening for a sober, steady and handsome bachelor doctor in one of the Transvaal towns. Send photo.

—It is said perforations of the intestine can be detected if timpanitis be present by the respirating and cardiac sounds becoming audible on pressing the abdomen.

—UNFINISHED. Willie has a critical eye, and finding the new born baby without teeth or hair, insisted that baby was unfinished, and that another doctor should be employed.

—A bill has been introduced into the United States Senate to regulate the practice of medicine in the District of Columbia. A board for examination and license is provided for.

—The little human waifs picked up in the streets of the city will hereafter be sent to Bellevue Hospital. Under the old system of taking them to the police station 80 per cent. die of exposure.

—In the administrative County of London, during 1893, coroner's jury returned a verdict of death from starvation, or death accelerated by starvation, in fifty-one cases, of which sixteen were females.

—A surgeon lately practicing in Bristol, England, was called to the door by a ring, but instead of the expected patient found a collector for overdue rent. This so discouraged him that he killed himself.

—Prof. Wortoff, of Moscow, who held the chair of bacteriology at that university, has died of blood poisoning caused by a wound in the neck, inflicted upon him by the explosion of a flask containing a bacterial culture.

—There have recently been three successful cases of excision of the spleen for injury, at St. Thomas's Hospital, London. These, we are told by the *Lancet*, are the first successful cases that have occurred in Great Britain.

—A young woman living in Paris recently gave birth to a child, whose eyes were placed on the top of its head. The infant seems to be doing well, and crowds of people have tried to satisfy their curiosity by visiting the house.

—It is stated in the *Hospital* that the medical society of Berne is endeavoring to prevent the publication of notices of cases of suicide. It has been observed that suicides have frequently been suggested by these means.

—The death is announced of Dr. Hoppe-Seyler, the well-known chemical teacher and investigator, of the University of Strasburg. He published, in 1881, an exhaustive treatise on physiological chemistry, and later a practical handbook on the same subject.

—A recent London *Lancet* has interesting allusions to the successful use of electricity in trigeminal neuralgia and to long-continued treatment of tic douloureux, which is practically the same thing, with long and short applications of the current. Success is uniform in all cases.

—The fourteen-year old daughter of John Wilson, Augusta, Ky., has been crying all her life. When she plays or sleeps or goes visiting always the cry is in evidence, sounding as if it came from one in great grief, but it is a purely mechanical matter, and the child insists she does not know she does it.

—Dr. Canini, of Leghorn, a well-known Italian specialist in diseases of children, who died recently, has bequeathed his entire estate, amounting to 2,300,000 lire ($460,000) for the foundation of a hospital in which poor children suffering from diphtheria may have the advantages of the serum treatment gratuitously.

—Prof. Hajak, of Vienna, is reported to have declared that smokers are less liable to diphtheria and other throat diseases than non-smokers, in the ratio of one to twenty-eight. It also appears that smoking is always positively forbidden in bacteriological laboratories, because it is known to hinder the development of the bacteria.

—Dr. William Hunter Baillie died recently in England at the age of ninety-eight years. Dr. Baillie came of a long line of medical ancestors. He was the only son of Matthew Baillie, M.D., who attended George III. He was the grandson of Thomas Denman, M.D. John and William Hunter were his uncles, and Sir Benjamin Brodie his first cousin once removed.

—A news item from East Moriches, L. I., reports that Selden Reeve, eighty-six years old, who has been demented for several years and very deaf, evaded the watchfulness of his daughter's family this morning and jumped from the second-story window. A physician, who set a broken leg and wrist, says that the old man has fully recovered his mental faculties and his deafness has completely gone. His mind, his daughter says, seems now quite clear.

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ORIGINAL ARTICLES.

PSYCHOLOGY OF THE UNCONSCIOUS.

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Author of "The Monism of Man," etc.

II.

It would be interesting to retrace our steps and show the workings of the Unconscious among the races of Mankind in the evolution of Society, such as the origin and growth of language and religion, institutions of learning, of political constitutions, and municipal and commercial centers; its influence on the incitements, incidents and results of war, as well as conflicts of industry; the rise and fall of nations and peoples, etc.; but to do so would exceed the space to which I have limited this essay. I cannot forego making the remark, however, that the great events of history, events which have made eras and epochs and which have been attributed, by the ignorant and unthinking, to the authority of Providence, or to divine interpositions because they were produced independent of human volition, have been due to the influence of the Unconscious—the power that evolved man in the first place, and compels him to work out a destiny not of his own conceiving. and to carry out a purpose not of his own creating,

It has been observed that "mind is the genius of the world," the creative energy working with an unconscious purpose to a predestined end. The observation was not meant to be confined to the informing conscious mind, but rather to include all mind—the unconscious mind even more than the conscious. The phenomena of conscious mind are confined to a comparatively limited sphere—to man and a few species of animals below him; but the phenomena of the Unconscious are universal, embracing those of the solar system and the actions and interactions between worlds and every species of being upon them. This unconscious creative energy may be especially observed in the phenomena of organic activity, such as reflex movements, conservation and repair of organic beings, instinctive operations; the cell and its functions, of both the vegetable and animal; the movements of gases and fluids, as well as the tiniest molecules of the inorganic kingdom. I have already adduced a little of the great volume of evidence that exists in support of this contention, so far as the animal kingdom is concerned. It remains to cite in its support a little of the evidence afforded by the vegetable kingdom.

The organic activities of the plant are closely allied to those of the animal. The principle of propagation is the same in each, and each exhibits similar purposive acts in furtherance of its designs. Many plants, like certain animals, possess the power of reproducing themselves from a single part, and of repairing wounded vessels. The wonderful psychic activities of the cell are nearly alike in each kingdom. The similarity of the cells of the two kingdoms may be likewise observed in the differentiation of their functions. Every cell is a chemical laboratory in which nutritive material is prepared for building and other purposes of the plant; but what concerns us most, in this connection, is the marvelous fact that "each cell absorbs only those substances which it can make use of, or if it takes up aught else, it sends this on unassimilated." While the most powerful microscope can discern no difference in the constitution of these vegetable cell-organisms, one cell will elaborate wood-fiber, another sap, another starch, etc., from the same fount of nutritive material. I am aware that physiologists have a way of explaining the nutrition and circulation of plants (as also animals) on mechanical and chemical principles. The late Prof. J. W. Draper explained the circulation of the blood in mammals on such principles, and could see no reason for calling in the aid of living or unconscious forces to account for it. But such an explanation does not explain, as Von Hartmann has pointed out. Besides, it robs the facts of their real significance and chiefest glory. The absorption of the cells "takes place rather with selection of direction and material, for otherwise no circulation and no distribution of nutritive matters to different cells could take place." *

The progenitive instinct is possessed by plants as well as animals. Though it is less strongly marked, still the sentiment of motherhood is observed in the plant. Many species of the latter take special care of the seed in budding time, in protecting it against rain and frost, by wrapping their petals around it, or enclosing it by the lips of their corollas. Many plants take this precaution at night to protect the young and tender bud from the dew.

"The *Impatiens noli me tangere* hides even its flowers under its leaves by night." Many plants enclose their young in horny cases, and these again in thorny burrs to preserve them against rapacious birds and insects, and to assure their coming to maturity. Most ingenious of all are some of the aquatic plants to secure the same end. Instance the alga species, the water lily, the crowfoot, the water nut, etc., which send their flowers to the surface of the water for fertilization, and when it is accomplished, draw them to the bottom again. The contrivances to these ends are most ingenious and perfectly adapted to meet them, showing design, that while intelligent, is yet unconscious.

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* Philosophy of the Unconscious. II. p. 123.

Equally significant to the student of psychology are certain phenomena on the part of plants in respect of light. When the infant animal turns its eyes to the light, one does not think the act extraordinary, since it is known to possess sensitive ganglia, and therefore excito-motor reflexes; but the vine is known to be devoid of every rudiment of a nerve, and yet it will manifest the same impulse. I have known the common potato vine, when confined in a dark cellar, to run fifteen or twenty feet across the cellar bottom and climb a wall where a small opening existed and a little light entered. All must have witnessed the struggles of plants confined in the dark to get into the light. Instance the behavior of the sunflower, which will almost break its neck in its eagerness for the sunshine, and the common grapevine, which will invariably twine toward the light. Dutrochet relates that he saw "the leaf of a plant standing in the open air, whose upper surface was covered with a small board, try to withdraw itself from the screen by means which were not always the same, but were always of a kind which must most quickly and easily lead to the goal; thus this happened now by means of a lateral bending of the leaf stalk, now by bending of the same leaf stalk towards the pedicel." Other observers have witnessed similar phenomena. "Knight saw a vine-leaf whose under side was illuminated by the sun, and whose approach to a natural position he had blocked in every way, make every possible attempt to turn to the light the right side, with which it was mainly necessitated to respire. After it had, for a few days, attempted to approach the light in a certain direction, and by bending back its lobes had almost covered its under-side therewith, it spread itself and removed further from the window of the glass house, in order to approach the light in the opposite direction." *

M. Dutrochet relates similar observations, and remarks: "If one sees how many means are here applied to attain the same end, one will be almost tempted to believe there dwells here a secret intelligence which chooses the most appropriate means for the attainment of the end." M. Dutrochet would hardly dare to invest such phenomena on the part of plants with the attribute of intelligence, for such an acknowledgment would carry with it certain other conclusions which would shock the theological sensibilities of our scholastic friends, and yet he was deeply impressed by them. He could not comprehend them, Von Hartmann observes, "because he was not acquainted with unconscious psychical activity."

I have already alluded to the unfailing certainty with which plants select their food. Even in a habitat inimical to them, environed by poisonous substances in solution, they choose only that which is good for them, and eschew that which is bad for them. Their instinct of the whereabouts of water is unerring. In one of my excursions to the country, one dry season, I observed a certain elm which, in search for water, had sent numberless rootlets several rods away to a ditch where there was running water. When I saw that it had not sent rootlets in any other direction for this purpose, I could not but wonder how that tree, consisting to the outward sight of cellulose, sap and chlorophyll only, without a rudiment of nerve cell or nerve substance to hang an instinct, or to affix a reflex impulse upon, knew the existence and direction of a stream of water.

The habits of the trailing and climbing vines show instinctive powers to a degree not inferior to some of the lower species of animals, the annelids, for example. It is interesting to note their circular movements in search of something to climb or wind themselves upon, gradually enlarging their radius until the sought-for object is found. The tendrils then attach themselves, and the plant begins its ascent in a spiral direction, and always in the same direction. Nor can it be deflected from its course, or made to climb in an opposite direction. Certain climbing plants, moreover, make choice of a support. They will not take an inorganic or lifeless thing to climb upon, but always select a green or living shrub, something that they can subsist upon after the death of their roots and they cease to draw nourishment from the earth. Von Hartmann quotes Mohl, to the effect that "if one unrolls a young convolvulus from its support and winds it around again in the opposite direction, it will return into its original spiral direction or will surrender its life in the endeavor. * * * If, however, one allows two such plants mutually to embrace without foreign support, and so to climb by one another's aid, the one voluntarily changes its solitary direction in order to make this mutual embrace possible. * * * Here one finds," says Von Hartmann, "even the variability of animal instinct in the most remarkable form."* Here, at least, is most obvious "purposive action without consciousness of purpose."

The most significant facts of instinctive actions on the part of the vegetable kingdom of any yet referred to may be found in the phenomena of insectivorous plants. The late Mr. Charles Darwin, with characteristic industry, gave this species of the *carnivora* special study, the result of which was embodied in a volume bearing that title. The volume will repay a patient perusal, not only by the botanist, but also by students of psychology.

Mr. Darwin confined his studies on this subject chiefly to the *drosera rotundifolia* (sun dew) and its numerous varieties. The habits of the *Pinguicula vulgaris* and of the *utricularia neglecta*, both insectivorous plants, are only second in interest and significance in connection with the subject of unconscious psychic actions, to the *droseraceæ* All are of exceeding interest; but since I cannot within the limits of a single paper go over the whole subject, and since, also, the *drosera rotundifolia* is best known to the profession, being well-known as a medicine for throat and lung affections, my observations will be confined to that species. The *drosera rotundifolia* is a perennial plant, growing in mossy, turfy bogs, of but a few inches in height, and is a native of the southern parts of Europe and other places. The scape bears from three to six leaves, some standing vertically, others projecting horizontally, the upper surface of which is studded with what Mr. Darwin calls gland-bearing filaments or tentacles, which he so named from their manner of acting. These glands or tentacles are numerous, each leaf having more than a hundred, at the tip of which there is a minute gland. In one instance Mr. Darwin counted as many as 290 of these hair-like tentacles or pedicels. These glands secret an extremely viscid secretion, "which glittering in the sun, has given rise to the plant's poetical name of sun-dew."

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*Cited from "Philosophy of the Unconscious," Vol. II., p. 135.

*"Philosophy of the Unconscious," II., p. 137.

This plant is chiefly carnivorous, and, since it never sleeps, may be said to lie in wait for its prey, which consists of small insects and the seeds and pollen of flowers, or whatever else of an organic nature it is able to seize upon. It does not, like the rootlets of plants in general, go in search of food, but covertly waits, like certain other of the *carnivora* tribe, for such victims as may have the misfortune to fall in its way. It is difficult to imagine a more subtle and ingenious device for catching and devouring small prey than is afforded by this leaf thus constitued and endowed. I cannot do better than to quote Mr. Darwin's account of the manner in which insects and other objects are captured by this plant:

"If a small organic or inorganic object be placed on the glands in the center of a leaf, these transmit a motor impulse to the marginal tentacles. The nearer ones are first affected and slowly bend towards the center, and then those farther off, until at last all become closely inflected over the object. This takes place in from one hour to four or five or more hours. The difference of time required depends on many circumstances, namely, in the size of the object and on its nature; that is, whether it contains soluble matter of the proper kind; on the vigor and age of the leaf; whether it has lately been in action; and, according to Nitschke, on the temperature of the day, as likewise seems to me to be the case. A living insect is a more efficient object than a dead one, as in struggling it presses against the glands of many tentacles. An insect, such as a fly, with thin integuments, through which animal matter in solution can readily pass into the surrounding dense secretion, is more efficient in causing prolonged inflection than an insect with a thick coat, such as a beetle."*

The viscid matter secreted by the little glands referred to possesses the double function of attracting insects and of digesting them. The secretion possesses all the digestive powers of the gastric juice of the higher animals. It will digest seeds, solid particles of meat, and even bone, cartilage and the enamel of teeth. The sensibility of the hair-like tentacles, though nerveless, is greater than that of animal tissue, and the property of irritability is not inferior to that of muscular fiber. And yet it does not possess nervous and muscular tissue, and it is equally devoid of nerve filaments and nerve centers.

To illustrate the high degree of sensibility possessed by the filaments of the leaf of the *Drosera rotundifolia*, Mr. Darwin made experiments with several substances. He found the leaf more sensitive to the presence of phosphate of ammonia than to any other substance. So small an amount as the $\frac{1}{19,700,000}$ of a grain of this salt in solution applied to the leaf was sufficient to cause movements of the tentacles. "A little bit of human hair $\frac{1}{1000}$ of an inch in length and weighing only $\frac{1}{78,740}$ of a grain, though largely supported by the dense secretion, suffices to induce movement."* The leaf is highly sensitive to all nutritive material, but more sensitive to living insects, while it feebly responds and refuses to digest dead or decaying objects. "Even gnats," says Mr. Darwin, "if they rest on the glands with their delicate feet, are quickly and securely embraced." Yet they are insensible to the weight and blows of drops of rain, of which they take no notice.

The same distinguished investigator found that a bit of hair, $\frac{1}{50}$ of an inch in length, was not perceived when placed on the human tongue, and he thought it extremely doubtful "whether any nerve in the human body, even if in an inflamed condition," would perceive so small an object, supported in a dense fluid like the viscid secretion of a drosera gland, and "slowly brought in contact with a nerve." Yet the drosera plant feels it and transmits a motor impulse, thus excited, to a distant point. Such a fact was possessed of profound significance to Mr. Darwin, and he was led by it to declare that "hardly any more remarkable fact than this has been observed in the vegetable kingdom.† He could justly have made the remark stronger, for there is no phenomena more remarkable or more distinctively *mental* than this to be observed among animals as high in the scale of being as the ascidian.

The phenomena of the sleep of plants, which is so conspicuous among certain well-known species, affords another illustration of unconscious purpose. It is impressive to see the clover plant close its leaves at night and open them again to the morning light; and nasturtiums to fold their leaves and droop their heads on the approach of night. I am aware than Linnaeus concluded that this phenomenon of the flowers was largely due to changes of moisture and temperature; but he did not explain why changes of temperature and moisture did not affect all plants in the same manner. Linnaeus, with all his learning and familiarity with plant life, seems not to have penetrated the secret of its existence, nor to have comprehended the invisible unconscious force which dominated its phenomena. Moreover, "the time for sleep and waking is as different for plants as for animals," which would seem effectually to controvert the views of that celebrated naturalist. It is known, also, that plants do not sleep so well in cloudy weather; that their most profound sleep is the night following a day of brilliant sunshine. Nothing could be more natural nor rational, for they need less sleep in cloudy weather, when their psychic activities are less excited, than after a day of sunshine, when all their vital functions have been augmented.

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* "Insectivorous Plants," p. 9.

* "Insectivorous Plants," p. 263.

† *Ibid*, p. 33.

The instinct for the beautiful is as conspicuous in plant life as it is in the animal, perhaps even more conspicuous, for it is quite universal in the vegetable kingdom. Can anything that lives be more delicately beautiful than the lily, more daintily beautiful than the violet or pink, or more gorgeously beautiful than the chrysanthemum, or the Jacque rose? The members of the floral kingdom seem to vie with each other in the production of artistic effects, both of form and color. It has been claimed that Nature or the Unconscious cares only for utility, and that it ceases its activity when that end is secured; and that all these things exist for the edification and pleasure of that greedy savage biped, the forerunner of ideal man. The truth is that the Unconscious produces the beautiful for beauty's sake. Ages before man appeared on this planet, the wild rose and the delicate maiden hair graced the outskirts of the forests, and the beauty of the fruit blossoms lent a charming loveliness to the lonely fields and hill-sides. Everywhere in Nature, I repeat, beauty is an end in itself; attends upon the useful and ever crowns Nature's handiwork. Nothing can exceed the inspiring beauty of the fields in budding and harvest time.

The most commonplace plant in the vegetable kingdom clothes itself with the habiliments of the beautiful. The corn, with its long green leaves and flossy tassels; other cereals, with their bearded heads waving in the sunlight; the modest legumenocæ, with their rose-hued blossoms; and even the potato vine, with its flower-top corona at the instant of fruition, are all instinct with beauty having no necessary connection or relation with the useful, or idea of presenting a picture to please the eye of the plodder who tills the soil and aids in their production. The landscape is most radiant, in the season for radiance, with the beautiful having no connection with the useful. Has any one discovered the uses of the daisy, the buttercup, or the golden-rod? And the gorgeous landscapes, so ravishingly beautiful: has any one unraveled the secret of their existence and reason to be? It seems as if the Unconscious had thrown up the everlasting hills just for the purpose of scenic effects, and clothed them with the primeval forests for the same purpose. And the forests, how majestically beautiful are they! They unite the useful with the beautiful. The reflective observer unconsciously and involuntarily feels like uncovering his head in the presence of the stately oak, or elm, or the dignified and lofty pine. In their forms and fibers lie treasured the unwritten history of centuries, to be revealed only to the sincere interrogator. They and their congeners and collaborators attest the existence and operations of an exhaustless energy, which, without nerves or nervous ganglia, lives in all and through all, and conducts all to a destiny as wise as it is inevitable, but at the same time, wholly unconscious.

INFLAMMATION OF THE MIDDLE EAR WITH INVOLVEMENT OF THE MASTOID. REPORT OF CASES.

By Wm. C. Bane, M. D., Denver, Colo.

I HAVE no apology for presenting this subject, for, since the valuable work of Macewen on pyogenic diseases of the brain and spinal cord has been given to the profession, our regard for the ear and its relation to the brain has been greatly increased.

For years the danger of neglecting the old standing cases of otorrhœa has been emphasized, but only within the last decade has a radical treatment of such patients been made clear. It remained for Schwartze, Hartmann, Stacke, Gruening, with some others, to give us the technique, and demonstrate the value of a surgical procedure for the cure of this dangerous class of ear cases.

Macewen, in the preface to his work, states that "since the majority of pyogenic affections of the brain arise from neglected otitis media, they ought to be regarded as preventable diseases and their prophylaxis scrupulously attended to."

I shall not consume your time in reviewing the anatomy of the middle ear and mastoid, nor in describing the radical operations, as they are very clearly given in the recent publications on diseases of the ear.* The following selected cases are typical of some of the forms in which the disease is encountered.

CASE I.—CHRONIC OTITIS MEDIA WITH CERVICAL ABSCESS—OPERATION—RECOVERY.

H. F. A., aged fifty-nine years, German, hotel keeper.

History: Family history negative. Has enjoyed fairly good health, but since the late war has suffered with internal hemorrhoids, which at times have bled quite freely. He has been accustomed to drinking liquors.

In November, 1893, he had an attack of inflammation of the right ear. The pain was slight, lasting but a few days, and was followed by a discharge, which continued about two weeks. A few weeks later the ear began to discharge again, and became quite painful, so that his sleep was interfered with. Early in February, 1894, he placed himself under the care of an aurist of this city, who treated him two months. In the latter part of March, 1894, he came to my clinic, and asked me to examine his ear. An examination revealed a small perforation in the upper posterior quadrant of the right tympanic membrane, through which an offensive muco-purulent discharge was coming. There was tenderness and swelling of the tissues covering the mastoid. He complained of pain in the right side of his head, and some dizziness. I advised an operation, but when I learned that he was under the care of an aurist I declined to treat him, and advised him to return to his physician.

During the third week in May, 1894, the patient came to my office and asked me to take charge of him. In the interval he had been under the care of three different physicians. He was in a distressing condition, having a care-worn expression, complexion dull and muddy. Below his right ear was a swelling, the size of half a goose egg. The disease had manifestly advanced in its destructive course. I found a free yellowish-green discharge coming from the canal; tissues covering the mastoid slightly swollen. From the mastoid downward and backward the tissues were swollen and boggy; the posterior auricular glands were indurated and were very much enlarged.

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* A most excellent treatise on this subject by Dr. E. B. Dench, of New York City, has been issued by D. Appleton & Co.

Patient was admitted to St. Luke's Hospital on the morning of the 25th of May, 1894. Pulse 100, temperature 101°; urine free from albumen and sugar.

Operation, 4 P. M. After the usual preparatory steps ether was administered. A large quantity of yellowish-green pus discharged from the external meatus as the dressings were removed, indicating a free communication between the ear and the abscess in the neck. A free incision was made from the apex of the mastoid upwards 4 c.m. The outer surface of the mastoid and its cells were found to be healthy. The incision was extended downwards into the abscess, from which between four and five ounces of pus were evacuated. The disease had extended from the antrum through the under surface of the mastoid into the tissues of the neck. Some of the posterior auricular glands were broken down. The diseased tissues were removed with a curette; then a counter opening was made at the lowest point of the abscess, and all of the parts cleansed with 1-4000 bichloride of mercury. The mastoid wound was packed with iodoform gauze, and a drainage tube passed through the abscess cavity of the neck. The parts were cleansed daily with pyrozone. There was no discharge from the ear after the operation. The temperature fell to normal on the second day and remained so. At the end of the fourth week the wounds were closed.

Patient reported at my office on the 10th of this month; the ear has remained well, the hearing being quite equal to that of the other ear; that is, he hears the watch on contact. Both tympanic membranes are dull and thickened. It is manifest that it was more good luck than good management that the patient did not have an abscess of the brain instead of the neck. However, I shall not censure the physicians, as the fault may have been with the patient in not submitting to their judgment.

CASE II.—OTITIS MEDIA WITH MASTOIDITIS—OPERATION—RECOVERY.

J. M., aged twenty-seven years; American; carpenter.

History: Has always been healthy. On the 6th of November, 1894, he was exposed in a storm while driving from Colorado Springs to Denver. That night a severe pain developed in the right side of his head and ear. He was delirious for about three days, when a discharge began from his right ear. On the 16th of November he came under my care at the dispensary of the University of Colorado. He was very much exhausted, being scarcely able to walk.

Hearing: Right, watch, faintly on contact. Left, 50-60.

Right canal filled with muco-purulent discharge. A large perforation in the posterior half of tympanic membrane; swelling in front, back of and below the ear. Cantharidal collodion applied in front and back of pinna; ear cleansed with pyrozone, and patient directed to keep the ear cleansed with warm salt water. For the next three weeks he seemed to improve under local and constitutional treatment.

The perforation being large, the cleansing and antiseptic solutions not only cleansed the middle ear, but passed by the Eustachian tube to the throat.

On December 11th, he complained of dizziness, which impressed me that an operation was indicated. His temperature at that time was 100.2°. I called the attention of my colleague, Dr. John Chase, to the case, who, after an examination, advised waiting for further developments. There was no material change in his condition until December 16th, when he was taken with a severe pain in front of the ear, which lasted about an hour, and was followed by a prominent swelling, extending forward to the outer canthus of the right eye. On the following morning I found the swelling as above, and also considerable swelling and tenderness of the tissues over the mastoid and below the pinna, with induration of the posterior auricular glands. Pulse, 130. Temperature, 101°. He being unable to pay for a bed, I arranged for him to go to the County Hospital to be operated upon. Eight days later I was asked to see the patient at his sister's in North Denver. I found him feeling better, he having spent four days in the hospital. His ear affection, however, was not improved, though there was less tenderness of the parts. Pulse, 110. Temperature, 101°. Optic discs normal.

On December 25th he was admitted to St. Luke's Hospital. Operation, December 27th. I did what has been termed the *classical mastoid*, or Gruening's operation, removing the entire cortex, which was filled with pus, granular tissue and carious bone. The wound was cleansed with 1-4000 bichloride solution, packed with iodoform gauze, and covered by the usual dressing.

No pus was discharged from the wound or ear after the operation. At the end of two weeks the mastoid wound was closed. Patient's temterature was normal from the day after the operation. I inquired of him on the 14th of this month, and learned that his hearing was good, and that his ear had not given him any trouble since he was operated upon.

CASE III.—SUBACUTE OTITIS MEDIA. TENDERNESS AND SWELLING OVER MASTOID. OPERATION—RECOVERY.

Mrs. J. J. M., aged twenty-three; American.

History: General health not good. Hearing has been defective for ten years. About the first week in January, 1895, acute inflammation of the right ear developed. The ear pained her for eighteen hours, when it began to discharge; aching and discharge have been continuous.

Patient came under my care on February 29, 1895. Hearing, right ear, 1-60; left, 18-60. Right canal filled with discharge; tympanic membrane inflamed, and a small perforation exists in Shrapnell's membrane. Perforation enlarged, and ear cleansed with pyrozone. Ear was cleansed with hot salt water several times daily. The discharge and pain diminished until March 8th, when the pain became very severe in, and back of, the ear, with some swelling of tissues over the mastoid, the discharge having stopped on the previous day. On the morning of the 9th there was a return of the discharge; the pain had diminished somewhat, but the tenderness in the ear and mastoid remained about the same. Pulse, 100; temperature, 99 5-10°.

During the afternoon of March 9th, patient was admitted to St. Luke's Hospital, and prepared for an operation.

Operation, March 10th, at noon. Ether was administered. Mastoid found to be engorged, but did not contain any pus. The posterior bony wall, down to the antrum, was removed and the parts thoroughly cleansed with 1-4000 bichloride solution; wound was packed with iodoform gauze, and then covered with the regular sterilized dressing. The next day the temperature was normal. There was no discharge from the ear or wound after the operation. In two weeks the mastoid wound had healed. A linear keloid developed in the upper end of the wound.

Patient was in my office on the 25th of May. Her ear has not given her any trouble, and she states that the hearing is as good as it was previous to the inflammation.

CASE IV.—ACUTE OTITIS MEDIA, INVOLVING MASTOID.

H. A., aged thirteen years; American.

History: Came under my care September 21, 1894.

General health is good. Left ear was affected when he was six months old with inflammation and discharge. During the past two years he has had some pain in, and at times, discharge from the left ear. Ten days ago the left ear became very painful, and a discharge soon appeared. Hearing, watch, right, 8-60; left, on contact. Right canal free, tympanic membrane dry, dull and thickened. Left canal is moist with a muco-purulent discharge. There is a perforation between three and four millimeters in diameter, in the lower posterior quadrant of the tympanic membrane. Tenderness in mastoid upon pressure. Patient has had pain back of the ear for three days, and chilly sensations for past two days. Pulse, 90; temperature, 99.8° at 11 A.M.

Treatment: Ear cleansed with pyrozone; canthardial collodion applied over mastoid. Calomel internally. Ear to be cleansed with hot salt water.

September 22nd, 11 A. M., temperature, 99.8°; some chilliness.

September 24th, 11 A. M., temperature, 99 3-10°, discharge free.

September 25th, 11 A. M., temperature normal.

October 8, 1895. Patient has been treated daily by cleansing. Discharge has ceased, and tenderness disappeared. Hearing, watch, right, 15-60; left, 18-60.

Patient remained under my care for two months after his ear was well, while I treated him for trachoma.

CASE V.—ACUTE OTITIS MEDIA, WITH MASTOIDITIS—OPERATION—RECOVERY.

T. E. W., aged forty-one. American; attorney. Was referred to me by Dr. T. J. Eskridge, on May 24, 1895, as the telephone message to him indicated that the case was one of ear disease.

At 11 A. M. I found the patient tossing about his bed in agonizing pain, located in his right ear, mastoid and side of his head. He had been suffering for thirty-six hours. Hearing, watch, right, 2-60; left, 50-60. Moderate tenderness to pressure on the tragus; marked tenderness to pressure on the mastoid. Inner half of canal swollen, most marked in the supero-posterior wall, near the tympanic ring. The drum membrane congested. Pulse, 84; temperature, 101°. Bowels constipated. Hypodermic of 1-4 of a grain of morphine, with 1-120 of atrophine, administered. Upper inner wall of canal incised. Leeches in front and back of ear. Ice poultice to the mastoid; hot water to the canal. Calomel by mouth every two hours.

The pain was controlled by an anodyne at intervals for two days. The ice poultice failing to abort the mastoid inflammation, canthardial collodion was applied. Dr. Eskridge and Dr. T. E. Taylor, the family physician, saw the case with me on the second day, and confirmed the diagnosis. The pulse ranged from 84 to 96, and the temperature from 100 to 102½°, for five days, when there was a free discharge from the ear. However, the tenderness in and back of the mastoid did not subside. As the greater inflammation was in the mastoid, rather than in the middle ear, I was unwilling to assume the responsibility of not opening the mastoid and relieving the engorgement, as I felt convinced that it would soon break down. The patient, knowing his condition, readily consented to have an operation performed. The left optic disc was hyperæmic.

Patient was admitted to St. Luke's Hospital on the morning of May 30th, and prepared for operation. Operation, 4:30 P. M. The tissues over the mastoid were considerably swollen. The mastoid was found to be very much engorged, and some of the tissues appeared microscopically to be broken down. The wound was packed with iodoform gauze, and covered with sterilized dressings. Some of the scrapings from the mastoid were placed in sterilized gauze, and later examined microscopically by Dr. Crouch, the bacteriologist, who found them to contain pus cells and streptococci.

On the second day after the operation patient's pulse and temperature were normal, and he had a good appetite. Previous to the operation he had not cared for food. On the third day the temperature and pulse went up, temperature ranging from 99 to 101° for the next five days. He developed rheumatic pains in the right arm and leg, for which he was given salicylate of sodium, which gave him relief, and brought his temperature down to normal in forty-eight hours. On the second day after the operation there was some discharge from the mastoid wound, which has been continuous. Wound was cleansed with 1–4000 of bichloride of mercury for about a week, when formalin solution, 1–1000, was substituted, which caused a marked diminution in the amount of discharge. Nineteen days have elapsed since the operation; wound is almost closed. Hearing, watch, is 5-60.

Remarks: Further comment on the first case is scarcely necessary. The indications for operation were so plain that any one should have recognized them.

The second case illustrates one of the most acute types of the affection. The constitutional involvement was very marked at the beginning, and the local disease was certainly sufficiently active to call for an operation much earlier than it was performed. Had the circumstances been different I would have insisted on an operation earlier than I did. The amount of destruction that had taken place in the mastoid clearly proved that delay beyond the first ten days or two weeks was unwise. It is in just such cases that Nature may, in her efforts to get rid of the disease by absorption, convey the pyogenic material to a more vital portion of the system, and disastrous results follow, as thrombosis of the lateral sinus, or abscess of the brain.

The third case was operated upon at a time when the mastoid was threatened, and clearly demonstrated the wisdom of operating early, as it not only saved the mastoid, but at once cured the middle-ear disease.

Fourth case was treated according to the indications, and yielded to cleansing and counter-irritation. While he was cured, the time may come when he will have a relapse.

With a thorough knowledge of the anatomy of the mastoid and adjacent parts, the operation can be done *antiseptically*, without fear of bad results. Macewen has performed the operation thirty-eight times, with as many recoveries.

In fifth case there was unmistakable evidence that the mastoid was involved in the inflammation, and this was proven by the streptococci and pus cells contained in the scrapings. Had I postponed the operation, caries of the bone would have occurred, and at the same time the system would have been burdened by absorption of the pyogenic product.

Patients with chronic otorrhœa, or those who have relapses. are in danger of pyogenic infection. In the light of the present day, we are seldom justified in permitting such patients to pass from under our care, without, at least, urging that they undergo the radical operation.

Carbolic acid, in doses of one-half centigram, repeated n one or two hours, it is said by Bacelli, will cure tetanus.

OXYGENATED CHLOROFORM.*

By J. Hubley Schall, M. D., Brooklyn, N. Y

To Dr. H. L. Northrop, Professor of Anatomy in Hahnemann Medical College, Philadelphia, is due the credit of first using and demonstrating the practical utility of oxygenated chloroform when it is used as an anæsthetic.

Oxygenated chloroform is a mechanical mixture of pure oxygen with the vapor of chloroform. The apparatus which I have employed for its administration is simple, and differs somewhat from that devised and suggested by Dr. Northrop. It is composed of a cylinder for pure oxygen, from which, through a rubber tube, the gas is passed into a graduated bottle containing a given amount of chloroform, and from this, by another tube, oxygenated chloroform vapor is carried into an inhaler. This inhaler consists of a nickel plated mask with a rubber face, which covers the nose and mouth; on the upper surface is a button valve for expired air. It fits closely to the face, is light and not clumsy to handle. After each administration it can be readily cleansed.

Should the oxygen gas become exhausted in the midst of an operation, I have a bulb which can be easily attached to the tube through which the oxygen has passed, and condensed atmospheric air can be used instead.

One great advantage of the anæsthetic is that there is a proper admixture of oxygen, so that the patient does not experience that smothered feeling which arises from the administration of either chloroform, ether or bromide of ethyl by the ordinary method; consequently the anæsthetic gives rise to little or no struggling. Another advantage is that it enables us, after the anæsthesia has been completed, to give a few inhalations of pure oxygen, thus washing out of the lungs the chloroform vapor.

The stage of resistance is short, or entirely absent.

Complete narcosis is produced in less time than can be done either by ether, chloroform or bromide of ethyl. The shortest time required to bring about complete narcosis was one-half minute. Instead of the ghastly countenance attending the anæsthesia of chloroform, the patients, under the oxygenated chloroform, presented a ruddy color of the lips and cheeks. Blood flowing from a wound was bright red.

The anæsthetic sometimes slows the pulse, but it is full and strong. The respirations are little, if at all, affected.

Vomiting is not the rule; if it does occur it is brief and consists mainly of mucus, and can be controlled by giving more concentrated vapor.

Recovery takes place quickly. With inhalations of pure oxygen or vaporized aromatic spirits of ammonia consciousness is regained, in many cases, in from one to five minutes; without the inhalations, from five to twenty minutes. In no case was great prostration experienced, nor have

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* Read before the Kings County Medical Society, February, 1896.

I ever noticed any delirium after the patient had been placed in bed.

The amount of chloroform used, even where time and great care was taken in those cases with cardiac and nephritic lesions, was comparatively small.

I could not ascertain the quantity of oxygen used in each case, as the cylinder contained 40 gallons, and would last from four to six hours of anæsthetizing.

Of a considerable number of cases where the anæsthetic was used the following are probably the most interesting:

Male, aged sixty-eight. Atheromatous arteries, urine albuminous. Operation, amputation of the thigh.

There was no radial pulse before operation. During operation it could at times be felt.

Time to anæsthetize required about five minutes. Pulse after operation was fuller in volume than before operation.

Male; urine albuminous. Operation, external perineal urethrotomy.

Pulse before operation sub-normal; during operation was full in volume and seventy-two.

Time for complete anæsthesia four minutes and a fraction. Quantity of chloroform used was about six drachms. There was no vomiting.

Male, seventy-seven years. Mitral murmur. Albuminous urine. Vesical operation. Before and during operation the pulse was the same. Time required for complete anæsthesia was three minutes and a fraction. About one drachm of chloroform was used. There was no vomiting.

In regard to vomiting, the anæsthetic was put to a good test in the following case:

Male, twenty-two years. Healthy and strong. Crush of arm, necessitating amputation. At the time I was about to administer the oxygenerated chloroform he informed me that he had just partaken of a hearty dinner. However, the anæsthetic was given, which rapidly produced complete narcosis, with no excitability. During the operation, which required fifty minutes, his pulse was strong and regular. At no time during the operation did he vomit, and his general condition was better during than before operation.

The advantages worthy of consideration in connection with the use of oxygenated chloroform are as follows:

I. Complete anæsthesia is produced in a shorter time than can be done by either ether, chloroform or bromide of ethyl.

II. The insignificant amount of chloroform used.

III. The pleasing aspect of the patient's countenance, instead of the death-like pallor attending the use of chloroform alone.

IV. Absence of nausea and cyanosis.

V. Tendency to quickly regain consciousness and freedom from cerebral excitement afterwards.

VI. Little shock.

VII. Its comparative safety where other anæsthetics seem contra-indicated.

In animals, a poisonous dose of oxygenated chloroform caused the following condition:

The respiration became feeble and intermittent, and finally ceased altogether. The arterial pulsations became excessively weak, but persisted longer than the respirations. The left side of the heart was the last to die, death being produced by paralysis of the respiratory centers in the medulla oblongata.

The heart of the animals experimented upon was found to be in motion long after the thorax was opened, while the respiratory movements had ceased about four minutes before.

A number of the animals, which were apparently lifeless, were quickly resuscitated by the administration of pure oxygen gas, combined with artificial respiration. Thus, in case of collapse under oxygenated chloroform, the free administration of pure oxygen gas, in combination with artificial respiration and manipulation of the area over the præcordium, would doubtless prove an efficient method of resuscitation in human beings.

STRIDULATION.

By F. R. Fisher, Ph. D.

I DESIGN here to note certain passages from Mr. Darwin's "Descent of Man," also certain conclusions which they suggest, as a possible explanation of the origin of the power of some insects to stridulate, and of the organs involved in stridulation.

On page 273, of the above book, Mr. Darwin says: "Westring has made the interesting discovery that the males of several species of Theridion have the power of making a stridulating sound, whilst the females are mute."

"The apparatus consists of a serrated ridge at the base of the abdomen, against which the hard hinder part of the thorax is rubbed; and of this structure not a trace can be detected in the females. It deserves notice that several writers, including the well-known arachnologist, W lckenaer, have declared that spiders are attracted by music. From the analogy of the Orthoptera and Homoptera, to be described in the next chapter, we may feel almost sure that the stridulation serves, as Westring also believes, to call or to excite the female, and this is the first case known to me in the ascending scale of the animal kingdom of sounds emitted for this purpose."

Again, on page 280, we have the following: "The males of other Diptera apparently try to win the females by their music: H. Muller watched for some time two males of an Eristalis courting a female; they hovered above her, and flew from side to side, making a high humming noise at the same time. Gnats and mosquitoes (Culicidæ) also seem to attract each other by humming; and Prof. Mayer has recently ascertained that the hairs on the antennæ of the male vibrate in unison with the notes of a tuning fork, within the range of the sounds emitted by the female. The longer hairs vibrate sympathetically with the graver notes, and the shorter hairs with the higher ones. Landois also asserts that he has repeatedly drawn down a whole swarm of gnats by uttering a particular note. It may be added that the mental faculties of the Diptera are probably higher than in most other insects, in accordance with their highly developed nervous system."

On page 283, Chapter X, relating to the Orthroptera in general, and the European field cricket (one of the Achetidæ) in particular, "we find Dr. Scudder was able to excite one of these insects to answer him, by rubbing on a file with a quill. In both sexes a remarkable auditory apparatus has been discovered by Von Siebold, situated in the front legs."

Mr. Darwin brings these facts to our notice, and deals largely in them in discoursing of the relations between insects of opposite sex; but while he also clearly describes and figures many stridulating organs, he does not, so far as I am aware, speculate upon the cause or causes that might give rise to the variation of structure, which, being advantageous, becomes persistent. Assuming a deviation which gave an advantage to some individual, he argues its subsequent preservation and development to greater perfection, on the basis of sexual selection. This is clearly indicated in his chapter on Orthoptera, page 286, where having described the fiddle device of the Locustidæ, he continues; "By what steps the more simple apparatus in Archetidæ originated, we do not know, but it is probable that the real basal portions of the wing covers originally overlapped each other, as they do at present; and that the friction of the nervures produced a grating sound, as is now the case with the wing covers of the females. A grating sound thus occasionally and accidently made by the males, if it served them ever so little as a love-call to the females, might readily have been intensified through sexual selection, by variations in the roughness of the nervures having been continually preserved." Thus it appears that he is content with having found the probable fundamental variation. Looking back, now, over the above citations, we note the declaration of Walckenaer, that spiders are attracted by music; also the assertion of Landois, that he has drawn down a swarm of gnats by a particular note, and, further, we have the remarkable discovery of Mayer concerning the sympathetic vibration of hairs on the antennæ of certain of Culicidæ "in unison with the notes of a tuning fork, within the range of the sounds emitted by the female."

It is clearly inferable, on the evidence educed by Mr. Darwin, that the function of stridulating is highly pleasurable to insects which are endowed with it; and, as the sounds come within the definition of a musical sound, it is not surprising to find that the structure of certain stridulating insects should respond pleasurably to harmony otherwise produced. In the case of Diptera, we have attraction by the simple repetition of a single note, while in Arachindæ, there is evident enjoyment of musical composition.

Now, it appears to me, as the assertion that insects are sensitive to musical sounds implies the necessary physiological capability of transmitting such pleasurable impulses to the nerve centers, that sensations arising within the nerve centers, from functional causes alone, will likewise be transmitted along the nervous system with equally pleasurable momentum, in a reverse direction, and ultimately become visibly manifest in muscular motion. How else may we account for the visible expression of the emotions in any organisms? To particularize more minutely, let us examine some of the evidence deducible from our own bodies, briefly. He who beholds a dreadful sight, instantly feels a shock of horror which penetrates the remotest parts of his structure; he feels a thrill, transmitted with lightning-like rapidity throughout his entire nervous system. Conversely, one may dream a fearful vision, and suddenly awakening finds himself bathed in perspiration, weak and tremulous. In the one case the cause is external, and its potent effect traverses the neural channels to their centers, whence a reflex action gives origin to certain characteristic manifestations; in the other, the cause lies entirely within the centers themselves, but is conveyed, no less powerfully in a reverse direction, over the same channels, and becomes manifest in external appearances. We may instance in evidence a like analogy between the sensations induced and educed by sights and sounds, pleasurable to the eye and ear, and by those mental pictures and whispers which entrance the imagination.

We know, further, that certain emotions give rise to particular sensations, which are so characteristic as to originate stereotyped expressions, intended to convey some adequate idea of the depth of the emotion: as, one may say his "flesh crept" as an indication of his horror, and yet again, from one who has heard thrilling music, we hear "cold chills ran over me." We are further conscious, at the same time that these are the same sensations experienced when the cause originates in the nerve centers. There are persons who delight to be tickled, and to many others a moderate degree of titillation, as by a straw or feather drawn lightly over the flesh, is pleasurable. With most persons this titillation produces a sensation commonly called "goose-flesh," which, if carefully examined, will be found to be caused by a contraction of the cuticle around the roots of the superficial hairs on the body. Not only does this occur at the irritated point, but over a considerable area, and perhaps over the entire body; and we therefore see in this phenomenon the direct action of an impulse on local nerve centers; its diffused transmission to other ganglia, and the reflex action from them to the surface.

It seems to me then, that, physiologically, any sensation to which a ganglion may be susceptible may be conversely produced by the ganglion itself, and I desire now to show how this function of a neural center may become a source of modification of external structure sufficient to give rise to a distinct variation, which, if useful, beneficial or advantageous in any way, will be "preserved and intensified."

Periodically the nervous system of any creature develops a condition that gives rise to an appetence which is the initial motive of the procreative act, destined to reproduce the individual. As the sexual desire augments, so does the restless perturbation of the creature, and he or she is compelled to seek relief by intercourse with a mate. To particularize, let us consider a member of the family Acridudæ, or grasshoppers, as being familiar insects, easily observed, and assume in the male the functional agitation in question. These insects stridulate industriously to excite or attract their mates, and the rather pleasant sound they emit originates from an apparatus well defined by Mr. Darwin, who says: "The inner surface of the femur (Fig. 14) is furnished with a longitudinal row of minute, elegant, lancet-shaped, elastic teeth, from eighty-five to ninety-three in number, and these are scraped across the sharp, projecting nervures on the wing covers, which are thus made to vibrate and resound." Harris says that when one of the males begins to play he first bends the shank of the hind leg beneath the thigh, where it is lodged in a furrow designed to receive it, and then draws the leg briskly up and down."

I conjecture that starting from the nerve centers, the impulses which constitute sexual desire are propagated along the system and manifest themselves in agitations of the limbs, which may be apparent as tremblings and contractions of the members resulting from muscular tension. We note these manifestions in many animals without further developments, but in the case before us we may readily perceive the possibility of a secondary result. For instance, the femur of the grasshopper has a hard integument, which probably was never quite smooth, and if under the extreme agitation of the leg the hard covering came in contact with the nervures of the wing there might be a sound produced; indeed this is highly probable. Now the periods of the vibrations, which constitute the tremblings of the leg, must, I should think, correspond to the periods of the pleasurable nerve impulses (else how could we account for them) and, therefore, the periods of the stridulated sounds should be in unison. And as the vibrations of the sounds conform to the vibrations of the body emitting them, the probability is that the pleasurable sensations are further titillated and stimulated throughout the whole physical structure by the advantitious contact of the leg with the nervure of the wing cover. If this be so it at once becomes clear that any insect which is subject to such an interference of the members more than another—either owing to the greater functional vigor it possesses, or closer juxtaposition of the members—will be subjected to greater stimulation of the sexual desire, and seek with more eagerness and perhaps oftener for a mate.

It follows then, that the peculiarity being advantageous to a more vigorous and better endowed individual, the resulting progeny will be more numerous, and, by the law of heredity, the stock will be improved in this respect. We may feel sure, too, that the resulting sensations from the above cause, being the augmentation of a pleasurable nervous condition, the procedure will soon be accentuated and made permanent by habit. In time, doubtless, the points of attrition will become differentiated from their surroundings, if only as calosities, and these again will become modified into the delicate symmetrical structure which we find so beautifully developed; the modifying and intensifying agent being the coercive force exerted by sexual selection. Nor will intensification of the aberrant forms alone be due to the above cause, for returning to our citations again, we are impressed with the averred sympathy of certain parts of the anatomy of insects with musical vibrations.

Individuals of the same specific variety doubtless have similar nervous systems, and what is true regarding the propagation of impulses in an individual male, will be more or less true of the female; or, to state the case more definitely: as we found, in all probability, that the vibrations of the stridulations were in unison with the neural impulses, so soon as the resonant apparatus became sufficiently modified to emit sounds of considerable intensity, the aerial undulations would impart their periods to such portions of the structure of a remote female as were best suited to be impressed thereby, and her nervous system would be agitated in sympathy. Thus the better endowed male would have an additional advantage, for he would be able to attract the female from a distance, and her excitation would no longer depend solely upon her own functional condition.

SOME EARLY EXPERIMENTS IN SERO-THERAPY.

BY JAMES ROBIE WOOD, M.D., NEW YORK.

(Continued.)

IN our day "*men who mistake a new phrase for a new thought*" crowd every medical threshold. Such men are prone to treat with disdain those who doubt the originality of modern reconstructions of ancient ideas.

After groping for more than twenty years along certain lines of thought I feel somewhat sure of the ground over which my feet have gone, and hope that I have accomplished sufficient experience to warn others not to waste precious energies in trying to cultivate sterile fields. Although my experiments began in 1875, which was many years before any of those in the same line of research, whose names are now deservedly honored all over the world, yet no one can charge me with taking undue credit to myself, having constantly declared that my attempts were simply repetitions of what had already been done in Germany long before I was born; the only difference being that I carried the contagious material through the living lower animals before applying it to man, while the older isopaths attenuated morbid matter by passing it through fluids and solids.

The time may soon come when we shall learn to do the same again, but in more perfect menstrua, and with greater precision of manipulation. Some methods of dealing with morbid products, which have suggested themselves to my mind, will be touched upon in the course of this paper; others are to be reserved for the article on "What will be the therapeutics of the future?"

The fad for applying serum from immune animals, which has not yet departed from many medical minds, is an insult to common sense and surely to reason. Who would for an instant tolerate the idea that serum from an animal immune to variola would be of the slightest value as a preventive or curative of that disease? Of what possible use as an antitoxin to smallpox is the serum of a man one year after he has recovered from variola, or that from a child a year after vaccination? Yet it is safe to say that their immunity from that disease is comparatively complete. But had serum been obtained from the same individuals a few days or weeks after recovery there would have been a possibility, nay a probability, of its acting as a useful antitoxin.

It is not immunity that yields a curative principle; but rather there remains, in a highly attenuated form, an infinitesmal amount of the morbid fluid, whatever it may be, microbe or some subtler agent of which chemistry or the microscope hath yet no ken. Future generations may or may not discover its face or form.

So long as the morbid matter is present, in dilution, attenuation, potence or whatever else pride and prejudice permit us to call it, *and no longer*, will such serum remain beneficial as an antitoxin, I care not whether it be a millionth or a billionth of a grain of the original material. It is simply a matter of dilution carried beyond the danger line. Many who but yesterday, in the narrowness of their medical intellects, ridiculed the therapeutic value of the millionth of a grain, are to-day on their knees in humble adoration before antitoxin's decillionth. It matters little if the original substance is churned and changed through the circulation of a horse, shaken in bottles of milk or water, or triturated with sugar of milk.

At some later date I hope to speak more at length on the mechanical and chemical potentiation of morbid matter, as well as of drugs.

My former paper contained an account of experiments in isopathic sero-therapy, instituted under my direction during the winter of 1875. The material for injection and superficial application was prepared from the tissues of rabbits, previously inoculated with tubercle. Notwithstanding that those patients only who were in an apparently hopeless condition were subjected to the treatment, one was much benefited, but as the improvement might have been due to other causes, the case was not recorded as surely a result of the serum injection.

My crude and incomplete experiments were the first in a long series of attempts to advance along the lines laid out early in this nineteenth century by the isopaths, whose once despised or unheeded lessons now enter thousands of attentive ears under the name of antitoxins.

Throughout the past ages occasional records of cure by identity have been found, but generally so entangled in a mesh of ignorant and superstitious practices as to forbid intelligent attention The isopaths bravely, but vainly endeavored to rescue it from the suffocation of universal contempt, and to place it among the statutes as a medical law.

Jenner's keen observation had already found and applied immunity from smallpox; but it never occurred to him to go further and formulate a general law based upon his own magnificent discovery. This honor belongs to the forgotten isopaths alone. Jenner and vaccination have suffered from ever recurring tornadoes of abuse; but the isopaths endured the more humiliating martyrdom of sneers, ridicule, and, in the end, worse than all else, they beheld their sincere efforts utterly ignored, and their offering upon the altar of humanity spurned and spat upon.

Within another decade isopathic antitoxins may reach their highest possible perfection, and we shall then acquire more definite ideas of their use, and the character of the diseases in which they may be successfully employed. Meanwhile, let us not forget or despise those humble men who announced the law to a perverse and narrow medical world. Remember it was not their fault that they were unable to bring within the reach of human vision the myriads of microbes which, all unknown, from time immemorial have been such powerful friends as well as fierce enemies of animal life.

While considering what was next to be done I sought and obtained, through Mr. Frederick Law Olmsted, permission to make autopsies upon the wild animals of Central Park. But birds, beasts and reptiles, evidently unwilling to sacrifice themselves in the cause of science remained obstinately healthy. My calls at their cages were fruitless, until one day the head keeper handed me an unconscious monkey, which was supposed to be dying of consumption. After piercing the simian's medulla, with the assistance of Dr. Chas. L. Nichols, I opened its chest and examined the lungs, hoping to find tubercular deposits with which to inoculate a fresh installment of rabbits, preparatory to another series of experiments. A careful scrutiny of the pulmonary tissue revealed no trace of tubercular lesion. We then examined other parts of the body. Upon opening the small intestines unmistakable evidences of typhoid fever were detected.

Another general survey was made, then the body was wrapped up and Dr. Nichols started with it, intending to take it to Ward's Island and there make a minute examination of its tissues. While on the way, fearing the possibility of conveying the infection to patients at the hospital, the doctor threw the treasured remains in the East River. This was to be regretted, as it was good material for inoculating other animals from which to prepare a typhoid serum. This I considered in later years, but having meanwhile found the efficacy of phenol, which I have used for nearly fifteen years with the happiest results, I did not care replacing this almost certain remedy by a doubtful and untried agent. A number of fruitless experiments, continued in the manner already described, convinced me that my crude preparation of serum was too uncertain and dangerous for presuming to use in favorable cases. It was hardly just to any course of treatment to select, as I had done, only those with advanced disease, having large cavities and being too feeble, in nearly all cases, to leave their beds.

With such an unsatisfactory record I began to consider the feasibility of treating morbid tissues so as to avoid the probable dangers of my first preparation. I sought for means to eliminate certain unsafe elements, so that I need not hesitate to use the serum in far more favorable cases. Many expedients from time to time suggested themselves, a few of which I shall enumerate, hoping thereby to furnish a few possible clues, so that some diligent traveler along the same road may be warned of its pitfalls, and guided to some safer and better path than I have been able to find.

Still, hoping to develop an idea of value to mankind, I never ceased considering other possible means to reach the desired end. Among these thoughts came the query: May we not find other mediums for modifying or changing the character of serum from diseased tissue which will be even better than carrying the material through living animals?

My intention was to conclude in this issue the account of my various trials of isopathic serotherapy in tubercular and cancerous diseases; but as the paper is already too much extended, the conclusion will be left for next month.

THE HOSPITAL ORIGIN OF PHTHISIS.

By J. A. CARMICHAEL, M. D., NEW YORK.

ON February 4, 1896, there occurred at the Academy of Medicine, in Paris, a most important and valuable discussion of the above subject, the force and earnestness of which, and its applicability to all institutions wherein are gathered the unfortunate subjects of one of the most, if not the most, fatal and destructive of diseases, tuberculosis, make it a matter full of the highest possible importance to all sorts and conditions of men, so we are induced to translate in full the observations and experiences of physicians prominent in the history of professional and scientific life in Paris, with the hope that the suggestions made may be accepted, and lead to the adoption of still more active and energetic measures for hospital and other sanitation and protection than at present obtain. We give a full and free translation:

The session of the 4th of February will be reckoned among the grandest and most vitally important in the history of the Academy. MM. Terrier and Debove presented the question of the contagion of tuberculosis in hospitals. The first, with his fearless and accustomed energy, the latter with cold and calm deliberation, but both with equal authority. The vital question of hospital hygiene was clearly set forth. The hospitals of Paris, in their actual condition, are the factories of tuberculosis. Will this truth, now admitted by all in theory, end in becoming a fact capable of practicable demonstration? Let us hopefully wish that it may be so. The eloquent discourse of M. Terrier was an earnest protest against hospital organization as at present conducted. ' It seemed to him extraordinary that the hospital contagion of tuberculosis should be discussed at all, so self-evident was it, and as easily effected as that of diphtheria. It is less pronounced and manifested because patients do not become phthisical for a time, more or less prolonged, after their exit from the hospital. But among those who are exposed to the contagion, and whose cases can be kept in view, the tuberculous mortality is formidable. M. Terrier's experience in this respect at the "Hopital Bichat" was absolute and unmistakable, so much so, indeed, as to cause him to defy the "Director of Public Assistance," and dare him to produce the figures. Students also became similarly affected, and other facts of daily observation, which the Administration of Assistance could easily learn by giving the subject a little consideration. Physicians demand that we should make war against dust. At the "Bichat," and under the windows of the hospital, wool is constantly being manipulated for mattresses, and to those who complain the answer is given that the wool is sterilized and the dust harmless. This sterilization—so called—is so perfect that there are often found in the wool numbers of insects, lice and fleas. The present model of the spittoons, too, is detestable. The wards of the Bichat Hospital have not been disinfected since 1883; they literally sweat tuberculosis! The rooms of the employes, dead of phthisis, are not disinfected, and the overcrowding of the wards is such that a surgical ward designed to accomodate thirty beds, now contains seventy patients. Continual intercourse between the surgical and medical departments is another source of tubercular contamination. The circumscribed regimen, which M. Terrier is pleased to denominate electoral, has increased the overcrowding, and it is now necessary to proclaim loudly the danger of the hospital as a source of tuberculous contagion.

The humble, and those of low degree, the sick and infirm, of whom so much is said, and for whom so little in reality is done, are the victims. M. Frank insisted upon the danger of tuberculous contagion, and was so impressed with it that he has felt it to be necessary to exclude specimens of dried tuberculosis from his laboratory. M. Debove urged that the danger of hospital contagion of tuberculosis came, not from dust itself, but from the presence in it of Koch's bacillus. He saw no occasion to request the administration not to sweep the wards, for the operation of sweeping was even now exceptional only, and but rarely indulged in. The practical demonstration of the tubercular contagion of the hospital is made for all, but the scientific demonstration could certainly be made by inoculating with tuberculine a few patients on entering, and again after remaining a certain number of days. But this practice would be dangerous, and would the experiment be sufficient?

Moreover, what more marked contrast could there be than the experiences of physicians in their practice in the city and those obtained in the hospital. Should we permit one of our patients to remain in a locality infected by a tuberculous subject before the most rigorous disinfection, or even after disinfection. Should we allow a parent of a consumptive to sleep in the same chamber, even if the patient shall have used the most antiseptic spittoon. In the army the danger of a tuberculous subject to those around him is regarded as so great that a change is made upon the first suspicion, unless opposed for political reasons. There is only one remedy for hospital tuberculosis contagion, and that is isolation.

The true value of the above discussion consists of the attestation given by scientific observers and witnesses of the communicability of the morbific principles of phthisis by contagion or by exposure to the morbid exhalations proceeding from the organs, principally the lungs, of subjects affected with the disease. Since the general acceptance by the profession of the germ theory, and the part played by the infinitesimalities of microbic life as pathogenous sources and disseminators of such toxic elements as constitute the disease known as phthisis, the bacillus of Koch has come to be recognized as its specific factor, and the phthisic—from the Greek verb *φθιω*, to destroy—or destructive processes are the result of the operations of myriad infinitesimal life that finds introition into the body, how, we know not, but can only conjecture as to its atmospheric association, and literally devours and consumes it. Every human effort possible is being made by the most laborious energy of the profession to stay the ravages of this ruthless enemy of man, but thus far without avail, and impotency is the outcome. True, that here and there the vis medicatrix of vigorous life, aided by judicious medication, may throw off the "perilous stuff," but unhappily, these are few and far between, and cheat death but for a little while. On giving to the scientific opinions of the distinguished representatives of the profession, as embodied in our translation, the critical consideration, which they so eminently deserve, one fact presents itself at once, and most prominently, not so much that the investigation of MM. Terrier, Debove and others, tends to the establishment of the truth of the contagious character of phthisis, as presented to their observation, but the account given of the general condition of the hospital wherein their investigations were made excites in us amazement that life could live in it an hour, a reeking hotbed of nastiness and all uncleanness. Our hyperæsthetic reader will pardon the use of the term, but it's "English, you know," and therefore the "chic" in New York creamdom to-day! If the reader will refer to M. Terrier's report of the filthy condition of the Bichat Hospital, wherein he says that the hospital had not been disinfected since 1883, he will accept our representation of it. Just think of it, for thirteen years the poisonous exhalations from hundreds, perhaps thousands of human bodies, many of them slowly rotting in premature preparation for the grave, and every inch of every absorbing surface in the wards where they lay, like "bloody Tybalt festering in his shroud," taking in the foul emanations, only to give them back again, and thus repeat the poisonous work. We don't wonder that M. Terrier said of the wards that they "*suent la tuberculose*," literally sweated tuberculosis. When we think of the inconceivable immensity of the procreative pullulation of microbic life, and that from a microscopic entity of it it germinates and swarms until the air pulsates with its restless vigor, it will not be difficult to believe that the Bichat Hospital, located in almost the very center of Paris, could furnish microbic toxine enough to poison and decimate a nation. But, thanks to progressive and beneficent science, that always has, and always will, reward the diligent and thoughtful student by the munificent bounty that awaits the solution of its hidden mysteries, and if we may not rescue the victim when once in the grip of the destroyer, we can surely stay its further immolation by the protecting purity of antisepsis. And here we would ask, on the threshold of another century, and with all the agencies, prophylactic and immediate, and so constantly increasing in number and perfection, and so generously bestowed upon the profession, if it can be possible that such an institution as the Bichat Hospital can be allowed to exist, and that too in the very center of civilization, and at the very fountain source of scientific inspiration and professional enlightenment. In his pride of patriotism and citizenship, the Neapolitan was wont to say "Veduti Napoli é poi morir"—see Naples, then die—and so the ancient Roman hugged himself in his "toga virilis," and proclaimed "civis Romanus sum"—I am a Roman citizen. We should think that Gallic pride would lower its crest, and "pipe small" at the thought that such a pestilent "foyer" was in its midst. There is a possible solution if our readers will recall the words of M. Terrier, by which he denominates as *electoral* the circumscribed regimen that increased the overcrowding. We take it that this word electoral is of political significance, and as we have shown in our recent estimate of New York's coroner and his methods, we suppose M. Terrier ran against a "pull," too, and so there's a French pull also on his side the water; heaven help him if it be so. But we may be thankful that the law of compensation is good to us here, even if we do have to sweat under the combined infliction of Dogberry coroners and courts of justice gone awry. We've no Bichat Hospitals here. True, that now and then, we may roll under our tongue the delicious morsel of a "petite esclandre" of philandering doctors and fair nurses walking hospital wards in sweet comity, but it's only for a day or so, especially if the powers that be are of "the female persuasion," and those dragons of virtue yclept Board of Trustees. The love of women for each other under such circumstances is proverbial, and will soon nip all such tender dalliance and surcharge the hospital atmosphere with lingual dynamite more lurid and deadly than the toxine of phthisical or any other microbe. Moreover, newspaper reporters are too Argus-eyed to make the pursuit of such gallantries either wholesome or of any protracted duration. Only a short time ago these vigilant reporters, whose incisive penetration into inside history, public and private, stops at nothing, gave to the press the inner life of a prominent hospital of this city, a most excellent and praiseworthy institution, and which was supposed to be in a most harmonious and flourishing condition. As the story ran, a gentleman of abundant means, as well as of abundant charity and benevolence, founded and endowed a hospital for the dispensation of help and health, and started it upon a successful career, which continued for a length of time, with the general recognition of its good work and its usefulness, until, on one inauspicious day, and by another act of kindness and friendliness, he introduced into the hospital a woman, as she was supposed to be at the time, and placed her in a position of some importance and power. From the moment that she began the performance of her legitimate duties she seems to have been inspired with an eager desire, and a fixed purpose to use the privileges of her place for rigorous oppression and cruelty to those subjected to her rule, especially of her own sex. To make a long story short, the blind and unreflecting kindness and favor and increase of power bestowed upon her from time to time by her benefactor, stirred the "maggot in her brain," and her ambition mounted higher and higher, and transformed her into a hybrid, half woman and the other half wild-cat, with the final result of causing the resignation by her patron of his position as president of the institution, and also the same of nearly all of the governing management of the hospital. Congreve wrote these words long ago:

> "Heaven hath no rage like love to hatred turned,
> Nor hell a fury like a woman scorned."

This was in illustration of the passion of jealousy, but he might have added to his poetic strain the story of the effects of power given to a designing woman, particularly if she belonged to the genus spinster, with disappointed and bruised affections, the cruelty of which always lingers in her memory.

To return, it would be both interesting and instructive to reader and writer to consider the elective association existing between various microbes, and the as various diseases resulting from the dissemination of their toxine excretions through the body. We will make mention of only one more curious fact of the relation of a pathogenous microbe and its resultant disease that has just caught our eye from an open page of the French journal from which we gather so much that is useful and instructive in progressive medicine. "The microbe of hospital gangrene: M. Chauvel reports in a work upon hospital gangrene, a complication occurring frequently among the Kabyle convoys returning from Madagascar. In the pseudo-membranous pulp of wounds, a special microbe is found which often exists in an exclusive state. Its presence serves as diagnostic and prognostic of the disease." The few remaining suggestions we propose to make in this connection, must have reference to hospital hygiene, the devotion of its designs and purposes, not only to the restitution to health of those who seek hospital help, but also to the prevention of the dangers of hospital contagion to those who commit themselves to its beneficence, and are under its elemosynary protection. Lastly, as to the hygienic measures adopted in hospital administration to prevent and cure disease. Without giving minute particulars of these measures in the great hospitals and charities of New York, we will repeat the broad assertion that no Bichat Hospital is possible here, and that all the protective means that the now wide and constantly increasing scope of antiseptic agencies can yield, are being used to the fullest extent, and with most renumerative efficiency. Without any purpose of invidious distinction, but simply as a recital of personal experience and observation, and impelled also by a sense of right and of a just acknowledgement of the honorable and conscientious performance of duty, and of the immense amount of good that is constantly being done by devotion to duty, we feel bound by the obligation always imposed by the golden rule of giving credit where credit is due. Under the stress of that obligation and from a clear conviction, through an ample experience of the absolute truthfulness of every statement we now propose to make respecting the subject of hospital hygiene, we do not hesitate to declare that we can signalize the administration of the Metropolitan Hospital on Blackwell's Island, now under the supervision and control of Dr. George T. Stewart as its Chief of Staff, and aided by the most unusually enthusiastic and competent co-operation of all connected with the institution, directly and indirectly, as meeting and fulfilling all the requirements of hospital hygiene in every sense, more fully and completely than any institution with which we are familiar personally, and know of through the testimony of general report. As seems to us, no one can pass through the entrance into this hospital without being impressed with the spotless cleanliness that pervades everything upon which the eye may rest, and the same can truthfully be said of every advancing step which the visitor may make in his round of inspection. In as few words as possible we propose to give the programme of the hygienic operations that make the rule of daily and weekly duty, always faithfully observed, and never allowed to suffer neglect or imperfection of detail.

1st. The entire hospital is thoroughly cleansed once a week by a certain set of women under the inspection of the matron.

2d. Every morning, each ward undergoes additional cleansing and purification by employes assigned to that duty. This embraces the washing of the walls, and especially is this duty observed in those wards devoted to phthisical patients, who under no circumstances, are allowed to defile them with phthisical expectoration. This last is received in vessels with covers adjusted, and in each one there is always half an ounce of solution of carbolic acid to maintain constant disinfection, the special object of the cover being to prevent the dissemination of contagious elements by flies, insects, etc. No handkerchiefs are permitted, nor expectoration received by cloths; but should this occur, they are either burned, or soaked in a bichloride solution, then washed with soap and chloride of lime.

3d. Upon each bed there is a perfectly clean, white spread, closely inspected every day at 4:30 P. M., and every spot removed, or a new spread substituted, same with pillow cases, blankets, etc. Each bed is carbolized once a week, and all bed frameworks painted with paint strong with turpentine, and very little oil, woodwork cleansed with kerosene, ventilation free, temperature 65°. As a deodorant through the hospital, and expressly in the phthisical wards, the exhalation by evaporation from a stove of the solution of the oil of the pinus silvestris, 3 parts to 1 of the oil of thyme, is thought to be an important element of the general disinfection, besides being both grateful and healing to phthisical lungs. The head nurse is held responsible for the cleanliness of her ward, and each subordinate nurse for her division.

4th. Every morning the rounds are made by the Chief of Staff and Superintendent, followed at a later hour by the Directress of the Training School with her nurses, to be repeated so that supervision is constant and complete.

5th. In the surgical department, and especially in the operating room, all dressings are sterilized, and all the clothing of operators and their instruments equally so; no sponges allowed, the use of sterilized cotton instead.

6th. Every patient applying is subjected to medical inspection before entering the hospital. This is to prevent the introduction of contagious diseases.

7th. As respects the hospital contagion of phthisis, but few evidences of this have been observed; indeed, only two could be distinctly traced. So it will be seen that nothing is wanting to insure as perfect hospital hygienic purity as can possibly be devised, and it is maintained uninterruptedly and inviolably.

A few words in relation to the administration of the affairs of hospitals in general, and while we shall "nothing extenuate or set down aught in malice," we shall not hesitate to express our convictions as to the evils that so abundantly prevail in so many of these institutions devoted to charitable purposes, and caused, in our belief, by too much government, if the expression may be used. While many of the old time aphorisms, nursery rhymes and laconisms that are taught us in early life, are true and stand the test of time, yet there are many others that experience teaches are not only not true, but absolutely pernicious in their operation, and very far from verifying what they propose to teach.

In the matter of its application to the government of hospitals and kindred institutions one of these wise old saws seems to us peculiarly inapplicable and inoperative. It is that one which tells us that "In the multitude of counsel there is wisdom." The per contra of "too many cooks spoil the broth" is, to our way of thinking, by far the safest guide in the management of these hospital communities. We are no believer in boards of trustees, and above all—though we are loth to say it—if the organization be of the gentler sex. To the best of our knowledge and belief, there are not many elements of permanency or harmonious co-operation in such an organizations. The reports that come time and again of bitter dissensions in the hospitals attest but too clearly the truth that a more limited form of government would serve the purpose of hospital efficiency very much more favorably and thoroughly than that seen as the outcome of government by boards of trustees, either male or female. To revert to the Metropolitan Hospital on Blackwell's Island and its admirable management, we will sum it up in a few words, and say that under the control and management of Dr. G. T. Stewart nothing is wanting to insure and effect, day by day, the most thorough and complete efficiency in all its hospital details by the monocracy, if we may be permitted the coinage of the word, as exercised by Dr. Stewart. After a sojourn of several months in the hospital we have yet to hear a single note of discord, and all and every detail of the various duties and operations we have already enumerated go on like clockwork, and we are glad to name the hospital as a model institution and abundantly worthy of imitation. We wish we had space to give in detail the history of the work in every department of practical medicine that goes on daily and hourly under the sheltering roof of this most excellent institution. It would be but a just tribute of praise and congratulation to one and all engaged in the performance of his and her several duties, and the thoroughness, conscientiousness and completeness with which every requirement of duty is met and successfully accomplished.

ON STATE EXAMINATIONS.*

Mr. Chairman and Gentlemen of the Committee:

For twenty years before I became a member of the Board of Regents, I was deeply interested in the subject of medical education. In an address delivered before one of the State medical societies in this city, on February 28, 1861, I urged upon the profession that every physician should understand Latin, moral, intellectual and natural philosophy, chemistry and all the English branches, and stated that it was very desirable for him to superadd to these a knowledge of French and German, and also expressed the desire that the study of medicine should be extended through four years instead of three. During the thirty-six years which have elapsed since that time, I have had abundant opportunity to see the importance of the preliminary education then suggested. In connection with other gentlemen, I was one of the originators of the law of 1872, which was the prototype of the existing statute creating the State boards of medical examiners. In conjunction with other physicians connected with all schools of medicine, I was actively enlisted in obtaining the passage of the laws of 1890 and 1891—by which the present boards of State examiners were finally created, and I was instrumental in formulating the law of 1889, relative to the preliminary education of medical students. No man now living in this State has had deeper or more abiding interest in the subject which we are this afternoon considering than he who now addresses you.

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* At the hearing on the Stanchfield bill (Assembly No. 728, Int. 653) before the Judiciary Committee, February 19, 1896, Hon. Wm. H. Watson, M.D., Chairman of the Regents Committee on Examinations, spoke as follows:

Prior to the passage of the law providing for the preliminary education of medical students in 1889 (chap. 466), and its amendments by the law of 1890 (chap. 499), and the passage of the law creating State boards of medical examiners in 1890 (chap. 507), the average standard of medical education in this country was so low, both in the abstract and in comparison with the other learned professions, as to have given rise to an urgent demand for its elevation, from within, as well as from without the profession.

This deplorable state of things had arisen from the fact that there was *no standard of qualification* for admission into the profession, except that which each one of the 123 medical colleges (twelve of which were within our own State) chose to adopt. In only 60 per cent. of these colleges was any examination required preliminary to the study of medicine, and in most of the cases where it was required, it was of the most elementary kind, and was determined by those who were pecuniarily interested in eventually granting diplomas to the matriculants of these colleges, with all the advantages which could accrue to the possessors of the said diplomas. Many of these colleges were carried on as purely commercial ventures, and each college established such a grade of qualification as was most conductive to its own interest. The schools desired to obtain all the students possible; the student wished to get all he could with the least expenditure of time and money. Hence the tendency was for each of the incorporated medical colleges to underbid the others in the paucity and laxity of its educational requirements. It had come to pass that the profession, which, more than any other, imperatively demands the very highest critical acumen—the facility akin to a quick and unerring instinct of differentiating similar cases of disease—the power which to the physician is worth more than all others, since upon it necessarily depends all his subsequent procedure in the treatment of disease—the ability to make a correct diagnosis, without which the judicious management of a case is impossible—that the profession which demands the exercise of that sagacious judgment which, like the scale of justice, is capable of weighing the smallest particles and of detecting the slightest variations, was very largely composed of men with degrees conferred upon them by authority of law and by institutions duly organized and chartered by law, who were more inadequately prepared in all branches of fundamental knowledge and in those preliminary studies which form the basis of subsequent education than the members of any other profession. Said President Eliot, of Harvard University, in his report of 1879-1880: "An American physician or surgeon may be and often is, a coarse and uncultivated person, devoid of intellectual interests outside of his calling, and quite unable to either speak or write his mother tongue with accuracy." The laws of 1889 and 1890 and their subsequent amendments were enacted, and in the short space of five years the State of New York has come to enjoy the proud position of standing in the very vanguard of medical education. To-day, however, we are confronted by the proposition contained in assembly bill No. 728, to again allow the medical colleges themselves to establish their own educational requirements and to supervise the preliminary examination of those intending the study of medicine. Whence emanates this bill, which, if passed, would at once undo all that has been gained in the matter of the advancement of medical education, and degrade the imperial State of New York from the proud position which she now enjoys? Does it proceed from the best institutions of the State? From those medical colleges from which the largest percentage of graduates have been able to pass the State boards of examiners with honor to themselves and credit to their *almae matres*, and obtain a license to practise? Do the professors of the College of Physicians and Surgeons of New York, of the Medical Department of the University of the City of the New York, of the New York Homœopathic Medical College and Hospital, of the New York Medical College and Hospital for Women, of the Women's Medical College of the New York Infirmary, of the Eclectic Medical College of New York City, of the Long Island College Hospital, of the Albany Medical College, of the Medical College of Syracuse University, of the Medical Department of Niagara University, of the Medical Department of Buffalo University appear here as sponsors for the bill? Do they complain that students from other States and countries are being driven away from New York medical schools, and that the advanced requirements are closing their doors? I do not so understand it. The representative of only one medical school has made such complaint. This law is for all, and not for the small minority of one of the medical colleges of the Empire State. Why, Mr. Chairman, the government of Harvard University has recently decided that no man can enter upon the study of medicine at that institution unless he has previously been the recipient of the degree of Bachelor of Arts from some college duly registered as qualified to confer it. Can it be that the great State of New York shall lag so far behind in the education of those who are to care for the health and life of its citizens, as not ultimately to require of them even a high school education as a preliminary to the study of medicine? The very suggestion is preposterous, and a disgrace to the intelligence of him who makes it. No, Mr. Chairman, the present law is a good law—a satisfactory law, and while it confers no special or peculiar privileges upon any class of the community, it is one that by its liberal, impartial and entirely catholic provision has commended itself to the good sense of the people of this State, as well as gained the hearty and cordial approval of those members of the medical profession of all schools of practice who, by their education, their character and their professional attainments, are the best qualified to judge. In this State we are especially fortunate in having a central educational and administrative body to pass on preliminary requirements for medical education, and to supervise and conduct the examinations for medical licenses. The Legislature has wisely placed the matter under the control of the Board of Regents of the University of the State of New York—an absolutely impartial court—and it is so administered that collusion, laxity or partiality is impossible. The possession of a license from the State boards of examiners of New York is an assurance to the public of the qualification of him or her who shall attain it, and is therefore a legitimate passport to professional success. The archives of the University will forever attest to any one interested, the exact tests relative to his or her preliminary and professional knowledge applied in the examination of any man or woman who has earned its endorsement. It is today by scholars and publicists conceded to be the most perfect system in the world. The absolute necessity of the methods adopted by the State through its Board of Regents, is now fully confirmed by the fact that more than 26 per cent. of those who have applied for license (all of whom under the laws which existed prior to 1890 would have been entitled to practise merely from having been graduated as doctors of medicine) are now rejected as incompetent, on account of their ignorance, to practice upon the citizens of this Commonwealth, and have betaken themselves to other States whose inhabitants are less fortunate in being protected by suitable statutory enactments. The profession, the medical schools and the people have now become accustomed to the existing law. It would be unfair to change it. While the standard is above that established in most of the other States, it is by no means equal to that of Johns Hopkins University or Harvard, and in the judgment of the speaker is yet insufficient, and certainly is not on a par with the requirements exacted from students in other professions in our State. To lower it would be to degrade the profession, to humiliate the State and to inflict a grievous injury upon the people. It would set back the hand upon the dial of progress for at least twenty years. I beg you, gentlemen of the committee, let it alone—let it alone.

Cancer is contagious, the contagion taking place through direct inoculation, and also by means of soiled linen and clothes. The period of incubation varies from a few months to several years.

The New York Medical Times

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REMOVAL.

The office of this Journal will be removed, May 1st, to 180 West Fifty-ninth street, Central Park South.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 19 Liberty St., N.Y.

MEDICAL EDUCATION.

THE life-long devotion of Regent Watson to the cause of medical education, the measures he has inaugurated, looking to the higher education of our profession and the better protection of the public health, entitle his speech, recently delivered before the Judiciary Committee of the Legislature, as chairman of the Regents Committee on Examinations, which we publish on another page, to more than usual weight, and the most careful and thoughtful attention.

Dr. Watson passed two years in Europe, 1881-1883, and made a critical examination of the different systems of medical education in various countries. On his return he delivered an address on Medical Education and Medical Licensure at the Twenty-Third Convocation of the University of the State of New York, held at Albany in July, 1885. In this address he showed that the scope and relations of the medical profession demand a high standard of education in its candidates, in order to ensure the greatest efficiency in its practitioners, and demonstrated that the standard was then so low as to have given rise to an urgent demand for its elevation. He strenuously insisted that it is the prerogative of the State to determine the educational qualifications of those who are to care for the lives and health of its citizens, and that there must be an entire separation of the teaching from the licensing interests, and outlined the proper conditions of licensure are as follows:

(1) A fairly liberal preliminary education.

(2) Four years of professional study.

(3) Examination and licensure by an impartial court appointed by the State.

Dr. Watson, during his whole professional life, has held sound medical tenets and principles. While his position has been in advance of that of his associates, the profession in every instance has finally adopted the propositions which, as a wise and prudent leader, he originated, described and earnestly advocated. As early as the year 1861, in an address before one of the State medical societies, he urged the lengthening of the term of medical studies from three to four years in the following words: "Let us seek to introduce and maintain a higher standard of professional requirements. I would myself desire that the time required for the study of medicine should be extended to four years instead of three." In his place as a member of the Board of Regents, as also on all other suitable occasions, he has endeavored to promote the general welfare of the medical profession, and also more particularly to elevate its standards. His influence in behalf of the latter is shown by the following extract from the record of the minutes of the Board of Regents for 1889, page 532:

"Dr. Watson asked the Regents to approve and request of the Legislature favorable action on the bill for giving to medicine the same statutory safeguard against illiterate practitioners now given to law by the law students' examination. After reading, it was voted that the Committee on Legislation be directed to support the passage of the bill."

It will be seen that Dr. Watson has the satisfaction of having witnessed the complete adoption into the form of law and into the tenets of the medical profession, of the three great reformatory measures to which he has given special thought, and for the success of which he has labored with undiminished energy and zeal.

These great principles having now been fully adopted into the form of law, and cordially accepted by the thoughtful, well-educated and enlightened members of all schools of practice in the medical profession of this State, Dr. Watson could never, without self-stultification, consent to the lowering of the standards of medical education which he has labored so long to reach, and which are now giving New York a proud position among her sister States, and tending to eliminate pretenders from the practice of the profession, while they are at the same time an inducement to highly cultivated physicians from every portion of the country to locate within the borders of this Imperial Commonwealth.

His able and exhaustive argument before the Assembly Committee on the Judiciary, in opposition to the Stanchfield Bill, the passage of which, at one fell swoop, would sweep away the standards of medical education in this State, should be, and we trust will be, conclusive against it.

The profession in this State has been fortunate in having a leader within its ranks, of that broad and liberal culture, that sincerity of purpose and untiring zeal in the cause of progress, to inaugurate and push forward, step by step, those measures which are doing so much to fill the ranks of the profession with men of greater culture and minds more carefully trained in all the details of their work, and to insure to the public greater protection to life and health. Dr. Watson was eminently fitted for leadership in the work in which he has accomplished so much, and for which he will long be held in grateful remembrance, by his rare scholarship, the clearness of his judgment, the force of his logic, and the sincerity, the honsty and intelligence he brought to bear upon every measure he advanced. In forty years of active, professional labor, in every official position he has held, as a founder and for many years trustee of the Middletown State Insane Hospital, as Surgeon-General of the State, as United States Pension Examining Surgeon and as Regent of the State University, there have been two pre-eminently distinctive principles upon which his whole professional life has rested, and these are:

1. No sectarian tests as a qualification for office, and no sectarian monopoly of State or National institutions.
2. The elevation of the educational standards of the medical profession.

It is a matter of congratulation to Dr. Watson to find the principles to which he has devoted the best energies of his life so fully recognized in the greater liberality, the broader culture and increased efficiency of the profession, not only in this State, but throughout the Western Continent.

THE SIGNIFICANCE OF PAIN.

IN a lecture at the Hospital De La Charité (*Milwaukee Med. Journal*), Prof. Potain spoke of the value of pain in the diagnosis of disease, and stated that its absence usually made the prognosis more sombre, latent affections being grave because they develop freely without any warning to the patient. It is because of the absence of pain that many affections have remained so long obscure and have caused great ravages, such as endocarditis, chronic nephritis and aroitis. Certain diseases, usually painful, may sometimes exist without this symptom; in walking typhoid fever the pain is so slight that the patient can carry on his ordinary avocation until intestinal perforation occurs, causing rapid death. In pleurisy the pain, sometimes so great, may be absent, but the disease is none the less serious on that account. Cases of angina pectoris in which there is no pain are the most dangerous.

Certain diseases consist only of pain, such as gastralgia and enteralgia; in others pain is the predominant symptom. It should, therefore, be studied with the greatest care, and its characteristics fully determined. Its intensity is what naturally strikes the patient, but this is not at all proportionate to its cause, and depends upon individual conditions. It is well-known that certain races are but slightly sensitive to pain, and that education plays a great part in this sensitiveness. A reliable physician states that there is at Chantilly a colony of English jockeys who, accustomed to horseback riding, are liable to numerous fractures, but seem to feel only slightly the pain caused by them; while their wives with but rare exceptions, never utter a cry during delivery.

The intensity of pain is of value to the physician only when it is excessive; for instance, an intensely painful spot in the side may indicate gangrenous pleurisy; the appearance of peritoneal pain in typhoid fever may indicate perforation of the intestine. The seat of the pain has but little relation to the disease; thus the painful point in pleurisy is nearly always the same, no matter what may be the precise location of the inflammation. The only exception to this is the pleuritic pain of tuberculosis. Dorsal and substernal pain ordinarily indicates an affection of the œsophagus, but to make an exact diagnosis it is necessary to use the sound. Gastric pain indicates the location of the disease, as a general rule, and the patients are not deceived when they complain of pain in the stomach. Disturbance of the biliary passages is generally marked by pain in the right hypochondrium to the other. Nephritic colic causes pain along the corresponding ureter. Vesical pain is easily recognized because of the tenesmus which accompanies it. There are pains, the seat of which is pathognomonic, such as angina pectoris, where it is prethoracic and radiates into the left arm, and sometimes in both arms. To this rule, however, there are many exceptions. Hepatic colic may cause pain only in the epigastrium and simulate gastralgia, while epigastric pain is often related to alterations of the solar plexus, such as that due to aneurism of the abdominal aorta.

Reflex pain is also an important aid in diagnosis. It is necessary to bear in mind, in this connection, the dorsal pain in gastric affections; the scapulalgia of hepatic colic; the pain in the posterior portion of the deltoid region in diseases of the liver; the irradiations of nephritic colic into the testicles and thighs; the brachial and cervical pains of angina pectoris; the costo-xiphoidal pain of diaphragmatic pleurisy and pericarditis. Rectal pain often extends to the thighs, especially in elderly, constipated men, and such pain should always call for a rectal examination. In affections of the colon pain is frequently felt in the precordial region. Chronic colitis causes the arrest of fæcal matter at the bend of the intestine between the transverse and descending colon, and the precordial pain arising from this is a source of frequent errors in diagnosis. Of 100 persons complaining of heart disease, about seventy have some affection of the colon. Ovaritis often gives rise to intercostal pain, and when the cause of a persistent neuralgia of this region in a woman cannot be found, it is well to consider the possibility of ovarian trouble.

Pain upon pressure gives more precise information to the physician than any other. When this exists at the points of emergence of nerve branches only, it indicates a neuralgia. When it exists along the entire course of the nerve the case is one of neuritis. The absence of pain upon pressure in cases of spontaneous pain indicates its reflex nature.

THE ALL-SEEING EYE.

WITH the new eye which science has recently given us some of the hitherto most closely guarded secrets of Nature are clearly unveiled. Through it the dark becomes light, and the opaque transparent. When the world was startled with the results and the possibility of the Röntgen ray we predicted that we were on the eve of discoveries in the physical and spiritual world unequaled in human history, and at no distant day the photographic plate would cease to be a necessity in recording the image, as science would perfect some process by means of which the eye could follow the rays through hitherto impenetrable substances. Edison has already reached that point. With the powerful cathode light behind his patient he gazes through a screen of prepared chemicals and sees every organ of the body as plainly as he sees the dishes on the dinner table. The fluorescent substances used in the screen are tungsten and calcium. These two elements are fused in a furnace, and at a proper degree of heat form little crystals. These crystals are glued to a piece of paper by a transparent celluloid paint, and form a coating whose sensitiveness is six times greater than a similar coating of platinum barium cyanide.

If the subject stands very close to the light, the body is perfectly transparent, and nothing whatever is seen. The light goes through bones and everything, just as sunlight goes through glass. If the patient steps a foot or two away from the light, the human skeleton stands revealed. A step further from the light, and the muscles, tissues and organs of the body appear as plainly as if there was no outside covering of flesh. We can thus, by changing the focus, diminishing or increasing the light by a larger or smaller number of tubes, see just as much or just as little as we desire.

A man comes to a surgeon with a bullet in his arm ; the surgeon takes his X ray lamp and his fluorescent screen and locates the bullet. He looks through the arm, through the bone if necessary, and sees just where the bullet is lodged. The bone may be fractured. The ray is turned on, and the surgeon is no longer compelled to pull and twist, for he can see the fracture with his open eyes, and can as readily join the parts together as the cabinet maker can unite pieces of wood to form an almost invisible joint. No photograph is necessary for the fluorescent screen, and the rays have made darkness visible. If these rays had been turned upon the stricken Garfield, the track of the bullet and the bullet itself might have been seen, and possibly the life of the President saved.

These onward steps in science necessitate a corresponding change in college curiculum of study and the aids to investigation in hospital and private practice. Hereafter every well-equipped college and every well-equipped hospital must include in their facilities for study and work bacterological culture and the Röntgen ray with Edison's fluorescent spectacles. The attention of scientists is now being directed to the action of the ray upon that germ life which kindles into active force so many forms of disease. What at first seemed a mere scientific toy is opening one of the broadest avenues of scientific investigation upon which the mind has everentered.

In this connection the recent statement of Mr. Denshah, one of the few remaining followers of Zoroaster, in a recent lecture, is of interest from his high position as a general scientist and an electrical expert. Mr. Denshah identified the X ray as one manifestation of what has for several years been known to Eastern scientists as astral light, or the seventh dimension of matter. He said that Western scientists were several thousand years behind the times, and predicted that as a result of Edison's experiments with the X ray he would soon be able to see through fifteen feet of solid matter.

JAPANESE MEDICAL STAFF.

THE Imperial Government of Japan permitted Col. W. Taylor, Army Medical staff, detailed by the British Government, to accompany their army in the field in the late Chinese war. Col. Taylor's report of their medico-military work has just been published. Although not taxed to nearly its capacity as a whole, the Japanese medical service, at the front and on the line of communication, as well as at the base, was admirably managed. With a forethought that English speaking nations might well practice, the Japanese had given their officers and men constant opportunity to master in time of peace every duty, and to be practically familiar with their entire equipment. It was owing to the careful regard of that principle that, as Col. Taylor expresses it, the actual work of the medical department was "easy, smooth and efficient," and the department was "able to go through its first campaign with such brilliant success." Nothwithstanding the occasional necessary overcrowding, "there were no cases of septicæmia." That speaks volumes, not only for the Japanese, but for the future. It establishes a record, a mark below which military surgery hereafter should not fall, but doubtless will. But to those, whether medical or lay, who remember what appeared to be the pathological necessities of the Rebellion, the surgical millenium would seem really arrived when that could be truly written. Very singularly, although the gospel of cleanliness and of asepsis was scrupulously followed within the hospitals, sanitation properly so called outside of them was not provided for by the regulations, and it was only after a long time that the Japanese seemed to be awake to its importance. When aroused they acted with their usual intelligence, energy and thoroughness, and, as in the case of Kinchow, they placed in a good sanitary state "a town which had been occupied for hundreds of years by the filthiest people in the world." The Japanese system is by no means perfect. For instance, their transport service is under dual control; and as no man can serve two masters any more successfully in the nineteenth century than in the first, some of the disabled who required moving suffered.

One instance of the gallantry of the medical corps is noted at Wei-hai-wei, where, as a regiment exposed to the sudden action of the quick-firing guns of seven vessels had many men killed and wounded in a very few seconds, and was obliged to fall to the ground and crawl to shelter to escape annihilation, the medical officers, separately and accompanied by stretchers and attendants, walked across the beach in the face of an incessant hail of bullets, "and in twenty minutes stretcher-bearers, attendants, and medical officers, walking quietly and coolly away, had removed every dead and wounded officer and man from the beach, the Chinese ships having kept up a continuous and terrific fire upon them all the time." As the historian well remarks, "it was a splendid deed of heroism that can never be forgotten," and "it will be an enduring proof of the efficiency in the field of the Japanese medical service." Their special addition to the *armamentarium chirurgicum* appears to be the use of straw ash, which, free from grit and enclosed in antiseptic gauze bags, as devised by Dr. Kikuchi, was applied as pads to the wounds, and was very serviceable.

SECTARIAN MEDICAL SCHOOLS.

THE following editorial utterance, by Dr. Daniel Lewis, President of the State Board of Health, occurs in the January number of the *American Medical Review*. His main proposition must command the assent of every enlightened and disinterested member of our common profession.

"The recent gift of $1,000,000 to Chicago University, by Mr. John Rockefeller, in addition to his previous munificent contributions, has been followed by a semi-official statement that a medical department may soon be established in that institution. Should this report be confirmed, we beg to express the hope that the same broad principles may govern the new enterprise which have characterized this wonderful university since its very begining. The time is passed when any narrow sectarianism in medical education can succeed. The fact has become evident to all that there is a science of medicine whose foundations are comprehensive and permanent. * * * With the recent discoveries in every department of medical research, the practice of medicine and surgery is rapidly becoming scientific rather than empirical, and the demands which students make upon medical schools must be met by a course of instruction which rises above the narrow limits of sectarian medicine. Thus we are led to note with satisfaction that the old style of medical school is being superseded by those departments of our universities like Harvard, Columbia and Johns

Hopkins, which must ultimately result in relegating to the rear rank those who have been taught *only* a part of the science and art of medicine. The day is surely coming when the so-called pathies will be expressive of defective and insufficient medical education, while the simple word physician will be sufficiently explicit to include every qualified practitioner of the healing art. We have never been able to see any more reason for different schools of medicine than for sects in astronomy and mathematics, and the medical student of the future will surely seek the ample facilities afforded by the medical schools of our great universities, which the sectarian schools can never adequately provide. * * * 'Eclecticism,' 'Homœopathy' and 'Allopathy' are nothing more or less than trade-marks * * * and the sooner the public realizes the truth of the statement the better it will be for all concerned."

IS THIS A CATHODE RAY PICTURE?

DR. LEROY DIBBLE, of Kansas City, has been illustrating before a medical society, reproduced in the *North American Medical Review*, what he calls "Medical Unrest," with a query: "Does it Mean Revolution or Evolution?" "The practice of medicine was looked upon," he says, "until about twelve years ago as a profession, not a trade. It was about this time that the medical colleges began to assume a purely commercial aspect, with a few honorable exceptions. Every student was a professional advertisement to the men who graduated them; they had their feelers out for business in a double sense. The graduates would send them more students, and advertise professor so and so, and elevate them above the common herd. Are these so-called professors by education, experience and social standing above the general average? Most emphatically *No!* There are usually two or three shrewd men in these schools, above the average in the worldly sense, that own the controlling interest in the stock of the college, who gather around them as assistants and professors men of inferior ability, who revolve around them as mere satellites, depending on them for positions, who sing their pæans of praise and do their bidding as directed. No self-respecting medical man should hold such a position, and yet the competition for place is so great as a means of advertising one's self that there is no trouble in filling vacancies. The rank and file of the profession have been taught to look up with almost pious reverence to these institutions and the men associated with them. The question is, Do they deserve it. The learned author, in putting the finishing touches to his picture, answers his query 'Does it mean revolution or evolution,' with 'all this is but the volcanic eruption which presages the long calm that will indicate the law of evolution in medicine.'"

ALCOHOLIC BEVERAGES.

THE *British Medical Journal* publishes some interesting results of investigations of M. Daremberg as regards the intoxicating principle of alcoholic beverages. M. Daremberg states that pure alcohol at 10° is less toxic than impure alcohol, such as brandy, and, above all, old brandy at 10°. Brandy made from wine at 10° is less toxic than wine at 10°. Brandy is in fact wine purified. "The intoxicating element in wine is not present in the part distilled, but in the residue. Red wine is more intoxicating than white wine; the latter is produced by the fermentation of the juice of grapes, whereas the red wine is the product of the fermentation of the juice, skin, and pips of grapes. It is the bitartrate of potassium which constitutes the special intoxicating principle of red wine. French beer contains 5 per cent. of alcohol; fifty cubic centimeters injected into the veins of a rabbit produced no result. The different varieties of cider, on the other hand, were generally very intoxicating. M. Daremberg injected alcohol into the veins of rabbits rendered tuberculous three days previously. Alcohol chemically pure did no harm, but brandy and wine killed them rapidly. The wisdom of giving alcohol to tuberculous patients is therefore doubtful. The toxic quality of alcoholic drinks is not thoroughly evident when there is neither kidney nor liver trouble. Healthy subjects easily eliminate these toxic substances, which under certain circumstances may even be valuable as occasional stimulants."

MARS AHOY.

MR. NICOLA TESLA thinks that within a short time we may be on speaking terms with Mars and other planets by means of electric waves. He thinks that such waves would communicate to other planets, just as disturbances of the sun are transmitted to the earth and produce disturbances here in the form of thunder showers, the transmitting of disturbances showing beyond doubt, that waves of electricity are propagated through all space. The idea is to utilize the electricity waves propagated through the atmosphere and the ether beyond. The same principle might be applied to transmit news to various parts of the earth.

As the earth is a conductor, an electric disturbance in one part ought to cause a change in the equilibrium of the earth's electricity, and therefore should be felt at all points on the earth's surface, and might be recorded by properly constructed instruments. Every city on the globe might be regarded as a big ticker circuit, so that a message sent from this city might be repeated in all the cities of the circuit throughout the world. Mr. Tesla has an instrument near completion, and is satisfied that the transmission of news about the earth, and even to the planets, by electric waves, is no longer a dream of the scientist.

GRAPE FRUIT.

THE grape fruit was rapidly growing in favor for its tonic properties, its delicious flavor and its grateful and cooling effects in the sick room, when the cold blast from the Rocky Mountains last year cut off nearly the entire supply from Florida, leaving us for the present almost entirely dependent upon the small supply from the West Indies. The terms shaddock and grape fruit have been used almost interchangeably, but notwithstanding both belong to the citrus family they are different fruit. The shaddock is the largest, coarsest, and least juicy of the citrus family. Grape fruit and forbidden fruit resemble each other so closely as scarcely to be distinguished. The grape fruit looks like a double-sized orange with a lemon-colored rind, while the forbidden fruit, of about the same size and color, is pointed at one end and has more of the flavor of the shaddock. The acid of the grape fruit differs somewhat from that of the orange and lemon, and in most febrile, gastric and intestinal troubles is much more grateful to the stomach.

COLDS.

A SURE remedy for colds, in their incipient stage, would be hailed as one of the most useful discoveries in our profession, and greeted with enthusiasm by physicians and patients. Dr. L. Duncan Bulkley, the distinguished skin and cancer specialist, claims in the *Medical Record* that there is an acid condition of the system developed which is sufficient to irritate the terminal ending of the nerves in the skin and mucous membrane, tending through susceptibility to impressions of cold by derangement of the capillary system. His remedy is to neutralize the acid condition, which he does by giving from 20 to 30 grains of the bi-carbonate of soda in a little water every half hour for three doses, repeating the fourth if necessary in an hour from the last. If the trouble is not relieved in from two to four hours the four doses are again repeated. Dr. Bulkley has found in the early stage this treatment is uniformly successful, but after the second or third day it acts with less promptness.

A NEW STYPTIC.

ANTIPYRINE almost since its introduction has been used as a styptic in nasal and other hemorrhage, applied in the form of a 5 per cent. spray or solution to the parts with great benefit. In other hemorrhages when parenchymatous oozing was taking place it has been equally successful. Dr. Roswell Park, of Buffalo, calls attention through the *Medical News* to a still stronger styptic by the combination of antipyrine and tannin in solution. The result is a precipitate of intensely agglutinative and cohesive substances. This applied to the bleeding part at once controls the hemorrhage.

CIVIL SERVICE RULES.

IT was recently claimed by the Comptroller of this city that civil service rules applied to the medical positions in the gift of the Commissioners of Charities. Judge Andrews has decided adverse to the claim of the Comptroller, inasmuch as the visiting and consulting physicians and surgeons are neither officials or employes within the meaning of the civil service acts; they receive no compensation; their positions, so far as pecuniary benefit is concerned, are purely honorary, and the Legislature had no intention that the most eminent members of the medical profession should be subject to the indignity of examination, either competitive or non-competitive.

ANTITOXIN PLUS INTUBATION.—Dr. Geo. Chaffee, instructor in intubation and tracheotomy at the New York Polyclinic, says (*Inter. Jour. of Surgery*, January, 1896): In diphtheria and croup, intubation has practically supplanted tracheotomy, and has ever stood ready when other remedies have failed, to save a large per cent. of our cases. Intubation will now be indicated less frequently than before the introduction of antitoxin, but the two—antitoxin and intubation—must go hand in hand, and on their record alone, they must, I think, stand out at the head of all treatment for diphtheria. At first one might think that antitoxin would leave no cases for intubation; experience and practice show otherwise. There will always remain a certain per cent. of our antitoxin cases which will, from one cause or another, require intubation, and, if recognized in time, may, perhaps, be saved. None should be allowed to go without these remedies when indicated.

WE call the attention of the profession to the announcement of a physicians' tour among the health resorts in Europe the coming summer. The tour will be under the direction of Dr. I. Gowing Middleton, of Paris, whose personal examination and careful study of the health resorts in Europe give to his opinions the authority and the weight of a scientific and practical expert. This tour offers to the profession a combination of pleasure with scientific study on a broader scale and with greater care for personal comfort and contact with leading people in the world of literature, science and art than ever before outlined.

THE annual report of the New York State Board of Health shows the highest death rate in the maritime districts, it being there 21.20 per thousand, and the lowest along the southern tier of counties, it being there 12 per thousand. The highest death rate in zymotic diseases is in the Lake Ontario and western district, 308.31 to each thousand deaths, and the lowest in the Adirondack region. In the latter region, contrary to the general impression, the death rate in consumption is the highest in the State, being 114.50 to each thousand deaths. Typhoid fever is more fatal along the Hudson, where it is 33 per thousand.

PILOCARPINE-HYDROCHLORATE.—Dr. Aulde says of this remedy that in doses of $\frac{1}{60}$ of a grain every two or three hours, it has a most surprising effect upon the bronchial secretions, and will often allay a cough which cannot be brought under subjection by any other remedy.

BIBLIOGRAPHICAL.

A TEXT-BOOK UPON THE PATHOGENIC BACTERIA. By Joseph McFarland, M.D. With 113 illustrations. Philadelphia: W. B. Saunders, 1896.

This work is intended to convey to the student and physician a concise account of the technical procedure necessary in the study of bacteriology, a brief description of the life history of the important pathogenic bacteria, and sufficient descriptions of the pathological lesions accompanying the micro-organismal invasions to give an idea of the origins of symptoms and the cause of death.

Part I. is devoted to general considerations, which include the biology of bacteria and their culture, bacteriological examinations of air, water and the soil.

Part II. is devoted to the specific diseases and their bacteria, including the acute inflammatory, the chronic inflammatory, the toxic and septic diseases. The subjects are presented with marked clearness, the distinctive points being brought out in such a manner as to be strongly impressed on the mind.

WEIR'S INDEX TO THE MEDICAL PRESS. Published monthly. $3.00 per annum. Single copy, 25 cents. 32 South street, New York.

The above is the title of a new publication which will appear shortly. Its importance to editors and authors will be apparent to all, and we are authorized to say to our readers that copies will be sent for inspection upon application and the mention of this journal. We believe that the work is in competent hands, and that it will be well done.

ELECTRICITY IN ELECTRO-THERAPEUTICS. By Edwin J. Houston, Ph.D., and A. E. Kennelly, Sc.D. Price, $1. New York: The W. J. Johnston Co., 253 Broadway, 1896.

The phenomena of electricity and magnetism have been considered as pertaining either to the electro-static, the electric or the magnetic circuit, and the laws of these three circuits have been developed on analogous lines. The authors believe that this treatment is the key note to a clear comprehension of the numerous and often complex electro-magnetic phenomena met with in the application of electricity to electro-therapeutics.

DON'TS FOR CONSUMPTIVES; Or, the Scientific Management of Pulmonary Tuberculosis. How the Pulmonary Invalid May Make and Maintain a Modern Sanitarium at His Home, with additional chapters descriptive of how every consumptive person may apply the forces of Nature to assist and hasten recovery, and also how the defects of heredity may be best overcome. By Charles Wilson Ingraham, M.D., Binghamton, N. Y., February, 1896, pp. 218; small octavo.

This little volume is intended, as the title indicates, for the patient, and it contains much valuable advice which will not come amiss to the physician as well.

ATLAS OF TRAUMATIC FRACTURES AND LAXATIONS, WITH A BRIEF TREATISE. By H. Helferich, M.D., Professor at the University of Greifswald; with 166 illustrations after the original drawings, by Dr. Joseph Trumpp. New York, William Wood & Co., 1896; pp. 142, large 12mo.

The book before us, which belongs to the series of superb atlases now being published, is an excellent example of the great value of these publications. The plates being true to Nature, and comprising every known abnormality in the department of which it treats, must be of practical service to students and to practitioners who treat this class of cases.

A HOMŒOPATHIC TEXT BOOK OF SURGERY. Edited by Charles E. Fisher, M.D., and T. L. Macdonald, M.D. Profusely illustrated. Chicago: Medical Century Co., 1896.

Our first impression of the book is not a pleasant one. It certainly, in mechanical work, is not a good specimen of book making, such as we are accustomed to see from the publishing house of Boericke & Tafel. The work is profusely illustrated, but the majority of the plates are not such as would be a credit to American art or American book making. Turning to the matter we are still more disappointed. We had been led to believe from the announcements which had been freely circulated through the Homœopathic press, that this work on surgery would rank with Goodno in practice, and contain the ripest thought and the most advanced teaching of the school of which it claims to be the representative. The work is a good one, as far as it goes, but the articles, though well written, are but little more than a reproduction and rearrangement of ideas gathered from the numerous standard works on surgery recently published. With the exception of the article on Bacteriology and Pathology by Dr. Laidlaw, there is so little originality in the volume that there is really no place for a critical review. Dr. Laidlaw's work, in text and illustrations, is that of a scholar and artist, of which too much in praise cannot be said.

Judging from this volume the line of demarkation between Homœopathic surgery and the standard authors of the old school is so faint as to hardly require a work of 1,400 pages to present it. The young Homœopathic graduate will very probably include this book in his library as a good working text-book, and will find it to answer, for the present, his purpose as well as any other.

Part III. of the Pictorial Atlas of Skin Diseases and Syphilitic Affections, from models in the Museum of St. Louis Hospital, Paris, published by W. B. Saunders, contains four full-page photolitho chromos, with explanatory wood cuts and text. The illustrations, in color and accuracy, are like a reproduction of the diseased tissues in all its minute details.

CORRESPONDENCE.

THE HOMŒOPATHIC TEXT-BOOK OF SURGERY.

Editors of the New York Medical Times:

It has been my opinion for a long time that a school of medicine occupying the position of the Homœopathic school, is entitled to show itself in surgery by a composite work, as in the "American Text-Book of Surgery" written by old school authors. We have been notified for more than a year that this work was forthcoming. When first announced that we were to have a text-book written by the surgeons of the Homœopathic school, we must confess the disappointment incident to it that the name of some distinguished surgeon, who had already won distinction as a writer, teacher and operator, had not been placed to represent it as editor-in-chief. That there are surgeons in the Homœopathic school of ready resources, of ripe experience, standing side by side with the most brilliant and the best in any school, no one familiar with the history of surgery in this country can doubt. Under the critical eye of such a surgeon we think the supervision of so important a work as a text-book by members of the Homœopathic school should have been placed. In this way, and in this way alone, would the distinctive points of a surgery by the Homœopathic School, if there are any sufficient to warrant a text-book, be brought into clear prominence.

The "American Text-Book of Surgery" has for its editor-in-chief no lesser light than Wm. Keens, M.D., LL D., a professor of surgery in the Jefferson Medical College, and one of the most distinguished surgeons of the old school. It will be observed in this "American Text-Book of Surgery" that the various articles were submitted in proof sheets to all authors for mutual criticism and revision. As a whole, therefore, the work may be said to express upon important surgical topics the consensus of opinion of the surgeons who have joined in its preparation.

Although it must be understood that, while it thus represents the views of all authors, each individual author is free from absolute responsibility for any particular statement, as the final opinion of the surgeons was under the supervision of the editorial chief, who is recognized as an able critic. We do not agree with the editor-in-chief of the "Homœopathic Text-Book of Surgery" in his preface, that a work should be issued to gratify "the exceedingly satisfactory development of surgical ambitions among members of the profession." A work representing modern surgery, written by representative surgeons of the Homœopathic school, was surely a desideratum. So far as the law of Hahnemann is concerned, there is very little of it to do with surgery. The study of reflexes, to which our attention has been particularly directed through the aggressive efforts, practical demonstrations and exhaustive writings of Prof. Pratt, has shown the fallacy of many symptoms and the nonsense of many a prescription. We are not questioning the law enunciated by Samuel Hahnemann in regard to the specific action of drugs.

Pathology and differential diagnosis, however, had not reached that degree of perfection to which we have arrived at the present day. We know now that a pain in the heart does not necessarily mean a disease of that organ, but may be a reflex from a remote part of the body, owing to the manner in which the nerves are distributed; we know that a terminal branch of a plexus of nerves may give a cry of pain which may be indicative of a disease or functional disturbance transmitted from a branch involving an organ which may be distinct from the seat of pain and involving an organ in a remote part of the body. Symptomatic indications, therefore, in a case of this sort, must be excluded, and the painful nerve traced to its root, and from thence to the causative point of pain. This is the only scientific method of dealing with disturbances. So much for the therapeutic feature of a surgery of the Homœopathic school. A work of this kind should not have been launched to the profession as this has been, even though the various authors of articles may be distinguished in respective fields of surgical work. The editor-in-chief again states:

"And the greatest amount of liberty allowed individual authors in expressing their views in relation to medical and auxiliary measures and treatments." Individual opinions should have come under the competent and critical eye of a properly equipped editor-in-chief rather than one disclaiming responsibility. An irresponsible work arranged as the one under consideration, holding each author responsible for his article, would have been more convenient in locating authors of the articles had the method been used as in the "Encyclopædia of Surgery," the names of the authors being placed directly under the subjects written upon. This work cannot be recommended to students, for none but advanced surgeons can judge of its misleading advice.

We do not think it necessary to issue a work containing over 450 more pages than the "American Text-Book of Surgery." We have books on special subjects, as the eye and ear, and therefore this one should have been written with less verbosity on these subjects. But verbosity is the characteristic of the work.

Does the book in question represent the most modern ideas of surgery, and have the surgeons of the Homœopathic school been recognized in all of the developments in the line of surgery, or surgical apparatuses? We look in vain for the Gorham surgical bed—a bed so superior to any other that any comparison is invidious.

Above *all things* the genius of the school should be recognized. It does not make a surgery representative of the school to copy the ideas and the treatment from standard books, though the author be a member of the Homœopathic school. We also fail to see any mention of the name of Northrup, of Philadelphia, who invented, *three years ago*, an apparatus for administering chloroform and oxygen, which really removes all danger of the use of this anæsthetic. This is a most *important advance* in surgery, and deserves especial attention. The pulse becomes stronger, and the color of the patient anything but blue, pinched or pale, by this method of the administration of the anæsthetic. And so we might go on, showing omissions and commissions all the way through. It is a fact not understood by three of the authors, at least, of this much lauded work, that the illustrations presented with their papers were indiscriminately appropriated to illustrate other articles, *not* written by themselves, inferior ones being placed in their stead from other sources.

In one article, no less than nine illustrations were transferred in this manner.

In the Treatment of Carbuncles.—It has been found the treatment for this condition is not at all modern in this work. Instead of horizontal lines, crucial ones are preferable. Instead of curetting, we have found that injecting with a lachrymal or ordinary hypodermic syringe, from center of opening to periphery, using an antiseptic solution, more efficacious, one prescription used, for instance, being 20 drops of carbolic acid, 1 drachm of glycerine, 3 of water. Instead of moist applications, which encourage the spreading of the carbuncle, we circumscribe it by painting with collodion from beyond the periphery to the center, leaving an opening of one-fourth of an inch, then dressing antiseptically. This arrests the difficulty at once. It is not new, as French journals have advocated methods in this line for years. In the treatment of gangrene we see no mention of that most invaluable of all remedies, *bromine*, which was used in the War of the Rebellion *more success-*

fully than any other remedy. The same omission occurs in the treatment of septicæmia, where this most valuable of all remedies is omitted.

In regard to tetanus, which depends in most instances upon bacterial poisoning, and for which excision and cauterization are recommended, to destroy the poison of course, nothing equals bromine, applying it to the part in the proportion of 1 in 50.

With the material constituting the Homœopathic work on surgery, under proper revision and abridgement by a leading surgeon, we believe a work might be constructed which would reflect credit upon that element of the profession constituted in the Homœopathic school of medicine.

Chronic Prostatitis.—We fail to find mention of that most invaluable remedy, chloride of ammonia, for this most disagreeable and distressing disease, chronic prostatitis. It is a very old remedy, and has long been recognized for its value in reducing hypertrophy of glands. Helmuth mentioned it in his work long ago. It will be noted we are criticising minor conditions, and not the brilliant major operations of our advanced surgeons. It is these difficulties, however, which give the surgeon his reputation, and in many cases the starting point of his career. The young surgeon begins usually by minor surgery, not by capital operations. How necessary, therefore, that this feature of the work be not only up to date, but *reliable.*

Perhaps there is no subject in the realms of surgery which has excited so much interest, which has been studied so carefully, and the technique of the operation developed to such a degree of perfection as that of appendicitis.

We believe the Creator made no mistakes and no omissions; neither did he neglect any detail in perfecting the wonderful machine called man.

To think that He failed to remove the appendix and left it for the surgeon to excise seems to us ridiculous, and should not be considered for a moment seriously.

First, it was some seed that caused appendicitis, but many other causes are now attributed to it, the latest being the bacillus coli comunis. There are also other forms of bacilli which are considered the cause of this difficulty. It would be a difficult thing indeed to find in the healthy individual the absence of some form of microbe-organism. It seems to us, therefore, that this considered cause of appendicitis cannot be true.

Fæcal matter is probably most frequently the cause of the lighting up of an inflammation in this blind infantile intestine.

One can soon be convinced by careful observation that appendicitis, in the majority of cases, is caused by neglect of the bowels. In this modern work, which is supposed to represent the most recent methods of managing surgical cases, we fail to note the most approved and advanced medical and hygienic methods in the treatment of this dire disorder.

Swain reports fully 90 per cent. of cures without the use of the knife. The "American Text-Book of Surgery," we believe, does not claim such a degree of success by the operative method.

Of the thirty cases which have come under the field of my observation, cases which include advanced conditions of peritonitis; cases with marked tympanities; cases where diffused peritonitis existed, with marked pain in the right iliac region, at times colicky in character, and often atended with persistent nausea; cases with a temperature ranging from 101° to 103½°, which have continued all the way from twenty-four hours to ten days, have been cured by mild forms of cathartics, of which sweet oil was the relaxing and soothing agent, heat and moisture in the shape of poultices, the auxiliary for combating inflammation, and colon injections for more thoroughly combating inflammatory conditions, as well as more completely cleaning the bowels. We claim, therefore, that the treatment laid down in the work under consideration is not only unreliable, but actually misleading and dangerous, and liable to prove disastrous to the patient, for the reason *that dry heat in any form must necessarily aggravate* an inflammatory condition, which in many instances has been caused by impaction. The whole treatment as laid down is so erroneous and so at variance with the conditions to be met, that we simply *warn* the profession in regard to following out the programme of treatment as there directed.

Under the head of rules, in summing up the article, we have always advocated that if pus existed, an operation was indicated. The second axiomic direction we consider inadvisable to follow, as any surgeon can prove if he understands the medical treatment. We know that a sudden attack, with increasing pain in right iliac fossa and high temperature, may be relieved in a few hours without the aid of the knife. It is a fact that some of the best surgeons claim that the safest and most successful time to operate is between the attacks, and not *during* the height of the inflammatory condition.

The third rule will not be necessary to follow if the case has been handled properly; the same with the fourth and with the fifth. To illustrate: An athletic gentleman came to the author a few months since with a history of chronic appendicitis—so diagnosed by one of the most celebrated surgeons in New York City, who had seen him twice, and each time advised that operative measures be resorted to. This patient then came under the observation of the author, and by judicious treatment was thoroughly cured. His last report was: "My physicians have been obliged to change their minds as to the necessity for an operation, as I am perfectly well."

In the treatment for hypertrophied tonsils, there is no mention of phytolacca, etc., and guiac, nor of the cautery puncture. The latter is used by the best specialists with marked success, and is free from danger.

Is there anything more common than a *sprain?* Yet you may look in vain in the index for such a difficulty, and no treatment is given for an accident which has often cost the loss of a foot. "The American Text Book" deals very intelligently on the subject. The book before us is advertised as "the crowning volume of the Homœopathic library."

I fail to make myself believe that this book is the "crowning volume in the library" of any physician, exexcept as one to avoid for reliable information. Where are we to look for the marked difference between schools which warrant, in this volume, the distinctive designation of "A Homœopathic Text-Book of Surgery?" If the learned, experienced and distinguished editor, wishes to show in the title and contents of his book that the difference between Homœopathic and old school surgery is simply that between tweedledum and tweedledee, and that the name is only used as a "trade mark," the profession will judge of his success.

M. O. T.

PEDIATRICS: RHEUMATISM IN INFANTS.

In Darwin's work, "The Expression of the Emotions in Man and Animals," he quotes Sir C. Bell, who states that it is interesting to observe infants because "they exhibit many emotions with extraordinary force, whereas in after life, some of our expressions cease to have the pure and simple source from which they spring in infancy."

When the baby cries, it does so to attract attention to its discomfort. Mothers and those who have the care of infants, and sometimes even physicians themselves, seem to forget that these little ones who cannot tell us of their sufferings, are only making use of the means which Nature has given them to attract our attention and to induce us to find out the correct answer, which is often of vital importance to the question of, Why the baby cries?

It is my purpose in this paper to call attention to one cause which is very frequently overlooked by physicians in making a diagnosis in the diseases of infancy.

We may suspect rheumatism in infancy when continuous crying is not relieved by change of position, by nursing, feeding or fondling.

The suffering may for an instant apparently cease when some unexpected pleasure is afforded, or when some novel sight appears, or when some one enters the room whose presence is particularly welcome to the little patient; but very quickly the face assumes the appearance of suffering, and the crying, moaning or restlessness is again noticeable.

So much is the sleep interfered with that the patient loses flesh and spirits, and presents other unmistakable evidence of being decidedly ill.

The diagnosis in such cases is very easily made to depend upon some imaginary ailment of the intestinal canal, since the suffering interferes with proper nourishment, and is almost certain to occasion some irregularity of the dejections. The patient may suffer from diarrhœa or general looseness of the bowels, with clayey or even greenish stools; or constipation may be continuous throughout the attack.

This disorder of the stomach and bowels may cease when the pain disappears, or may continue into the next attack.

.The continued loss of sleep may induce decided symptoms of nervous disorder, still further masking the true character of the disease.

The pulse may not be seriously hastened nor the sounds of the heart altered, although these symptoms would be naturally more or less present in cases of severe and continued pain.

The anxiety of the attendants is apt to be so marked in these cases that reflexly the little patient is injured by over-attention, fruitless medication, or irrational change of diet, so that in a short time the sum total of all the abnormal conditions equals a condition simulating serious ailment.

Meigs and Pepper, in their article on "Diseases of the Heart," state that "the most common diseases of the heart in childhood are pericarditis, and acute and chronic endocarditis.

"The most frequent cause of these affections is rheumatism.

"Although this is a comparatively rare disease of childhood, yet when it does occur, the cardiac complications are in larger proportions than in adult life.

"Furthermore, it undoubtedly happens that many deaths occur before any decided diagnosis has been arrived at."

Dr. Howard, in his article on rheumatism, in Pepper's "Science of Medicine," states that: "No climate or locality is immune from rheumatism. Cold is the most frequent exciting cause, and this is especially effective when applied to the body when in a fatigued state, or when overheated, or when perspiring freely."

I have had reason to believe that gonorrhœa in one or both parents has been the cause of symptoms simulating rheumatism in infants.

Dampness and chill which can be borne by adults without especially attracting their attention are capable of inducing a sharp attack of rheumatism in infants and children.

Dr. Howard states that: "The latest modification of the lactic acid theory of Prout is founded upon the modern physiological teaching that during muscular exercise, sarcolactic acid and acid phosphate of potassium are formed and carbon dioxide set free in the muscular tissue, and that cold acting on the surface under such circumstances may check the elimination of these substances and cause their accumulation in the system. This view, it is held, explains why the muscles and their associated organs, the joints and tendons, suffer first and chiefly, because the morbific influence is exerted upon them when exhausted by functional activity; and it further accounts for the visceral manifestations and the apparent excess of acid eliminated during the course of the disease."

Hutchinson is quoted as saying that: "A catarrhal neurosis, the exposure of some tract of skin or mucous membrane to cold or irritation, acting as the incident excitor influence, is the neurosal theory of rheumatism."

Maclagan asserts that "rheumatism is due to entrance into the system from without of a miasm closely allied to, but quite distinct from, malaria." But the fact that, unlike malarial disease, no climate nor locality is immune from rheumatism, and that heredity exercises a marked influence upon its occurrence, opposes the miasm theory of Maclagan. Generally speaking, the decided disturbances of the nervous system accompanying rheumatic attacks are noticeable; delirium, coma, chorea and convulsions have been observed.

In young children, we observe, as is in the case of adults, that the disease frequently has no tendency to become general; one joint only may be affected, the temperature almost normal, and the perspiration not profuse nor the urine scanty.

Dr. Howard calls attention to the fact that "muscular rheumatism in the form of torticollis frequently co-exists with rheumatic affections. The diagnosis is usually founded upon the suddenness of the onset, the absence of other symptoms of nerve disease, and the rapid course of the case, with favorable prognosis."

May we not assume that many of the cases of heart troubles in the very young have had their origin in rheumatic attacks? The absence of distinct physical signs does not exclude our diagnosis of rheumatism. The joints may be neither painful, sensitive to pressure, hot, swollen, nor reddened, and yet our patient is beyond a doubt suffering from "rheumatic" disease.

For those who have experienced the peculiar pains of rheumatism, no further description is necessary than to call to mind the gradual conditions of discomfort which are such an obstinate barrier to sleep, increasing as a rising tide, slowly and surely, in all degrees, from simple pain to downright unmitigated misery.

The climax of suffering suddenly disappears, or is so diminished as to be forgotten when mind and body are interested in the daily routine of life.

In considering the treatment of these cases, that which is known as the *preventive* deserves our first attention.

The actual treatment of rheumatism in infancy as in childhood is mainly hygienic.

Medicines are, generally speaking, only useful as accessory in the carrying out of the hygienic requirements. Undoubtedly the most careful attention to the diet is of the greatest importance since the digestive system is so early in the attack thrown into disorder.

We need to immediately institute methods which will mitigate the condition of the intestinal canal, and as rapidly as possible to supply a suitable nutrient which can be easily assimilated, and which is powerful enough to decidedly afford the needed strength to bear up the patient under the continued attacks of pain, and to restore the strength lost during the preceding attacks.

To accomplish this, it is necessary to fully understand what has been the character of the food supply up to date.

Since cold and dampness are recognized as exciting causes to a large degree in a majority of cases, the externals, such as the surroundings of the house and of the section where it is situated, must also receive attention.

Even the route of the infant's daily rides in carriage, and the places *where* it is exposed to the air must be considered. Too often this is left to the caprice of the nurse or attendant.

We must ascertain what are the most noticeable mistakes in the hygienic care of the infant up to the time of the attack, and what is to be changed in the interests of health at the present moment.

To do this intelligently, the condition of the sleeping room, and indeed of the whole house, from attic to cellar, must come in for a thorough investigation.

When we consider the character of the joints in infancy, it is not to be wondered at that they can easily become the seat of inflammatory action.

The articulating extremities of the bones are imperfectly formed, the cartilaginous structure is in a condition peculiarly favorable to inflammation.

The knee, elbow, and ankle, although more likely to be attacked than any other of the joints in the body, are less generally protected.

If we will observe the legs and arms of almost any infants of our acquaintance, we will notice that they are invariably exposed to cold and to sudden changes in the atmosphere. This is more noticeable in the knee than in the elbow, and more noticeable in the elbow than in the ankle. The little undervest is most likely to be sleeveless, and the knee has no other covering than a little flannel skirt, if it has as much as that.

About the waist is the large diaper, more or less damp, and this moisture not infrequently extends to the knees.

We do not wonder that infants suffer more or less from rheumatic pains, but we do wonder that they do not suffer more. Rational clothing for infants is then pre-eminently important. Many parents are inclined to believe that they will weaken a child by clothing it in flannel.

I have met with many sensible people who seemed possessed of the theory that children should be toughened by clothing them after the manner of North American Indians and the children of other wild tribes.

Such a theory is unreasonable.

For the protection of the body, to avoid congestion of the internal organs through sudden chilling of the surface in our changeable climate, to encourage the normal development of the bones, more particularly at the joints where growth is steadily taking place, in my opinion, a wool garment, fleece knit, such as has been suggested by Prof. Von Pettenkofer, of Munich, is absolutely desirable.

By this use of such clothing chills are prevented in cold weather, and sudden cooling after perspiration in hot weather. By such means the body is kept in the most healthful condition.

In suitable clothing, therefore, we are assisting to a very large degree in the prevention of rheumatism, kidney disease, catarrhal troubles and pulmonary consumption. The rational preventive treatment of rheumatism is, therefore, to be found in the hygiene of the home, in hygienic clothing and in wholesome food.

TREATMENT OF CONSTIPATION IN INFANTS.

I have noticed very frequently in practice that the condition of constipation in infants is one which deserves repeated caution to young mothers and those in charge of infants.

I find a variety of methods made use of to overcome this condition. Some introduce a piece of soap into the bowel, using any soap which may happen to be handy. This is a very popular remedy, and I believe is very injurious, causing considerable suffering and reflexly injuring the nervous system, making infants, for the time being at least, irritable and decidedly uncomfortable.

Almost any soap will exert an injurious effect upon the mucous membrane of the bowel.

I believe that some serious rectal affections have had their origin in this manner.

Another remedy very often employed with decidedly injurious results, is the injection of water more or less medicated.

Still another method is the injection of glycerine into the bowel.

Internally, preparations of castor oil, rhubarb, senna, etc., are used.

I have found that by attention to diet and the occasional use of small suppositories of gelatine containing boroglyceride, habits of constipation may be readily overcome without doing any harm. These suppositories I have had made for me for several years, and use them for infants, children and adults with uniform success.

It might be well in passing to call attention to the importance of inducing, even in the youngest children, the habit of regularity in opening the bowels.

The best time in the day is about a quarter of an hour after breakfast.

I have found in many families that the evening before going to bed is the chosen time, but I think this is a mistake.

It is also important that the bathroom should not be some cold, cheerless, disagreeable place; it should be well lighted and ventilated, and reasonably warm.

I have found in my practice among women, more particularly in the country, confirmed constipation had been induced by the cold, insufferably disagreeable boxes set up on end, more or less distant from the back door.

I mention this merely to show that where every obstacle is opposed to the easy carrying out of this function, constipation is extremely likely to ensue.

The hygiene of this subject deserves much more attention than it receives.

W. THORNTON PARKER, M.D.

Groveland, Mass., November 22, 1895.

Egbert Guernsey, M.D., will remove May 1st from 528 Fifth avenue to The Madrid, 180 West Fifty-ninth street, Central Park South.

LACTOPHENIN IN TYPHOID FEVER.

In a recent case of typhoid fever, and one of pneumonia, I had occasion to give lactophenin a thorough test.

In the case of typhoid fever, in doses ranging from 4 to 10 grains, repeated twice in six hours, it reduced the temperature, on one occasion, from 105½° F. to 102° F., and in another, from 104° to 101° F.; on the former the dose was 10 grains and on the other 2 grains.

The superiority of lactophenin over other drugs of its category is that it not alone reduces the temperature, but that it relieves abdominal pain, produces a quiet sleep and leaves the patient in a refreshed condition, manifested by a slight moistening of the tongue.

I have not as yet noticed any bad after effects. In the case above mentioned, it was used continuously for four weeks, the dose being gradually reduced from 10 to 2 grains, discontinuing its use only after the temperature had fluctuated between 98½° to 100° F.

In the case of pneumonia in a child four years old, it reduced the temperature from 105½° to 102° F., relieved the cough and produced sleep. The dose used was 2 grains, repeated in six hours. H. T. MILLER, M.D.

Springfield, O., Jan. 20, 1896.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

BIOLOGICAL SOCIETY.

M. Gellé described a particular form of Ménière's auricular vertigo, which is preceded by an aura like that of the great neuroses. It may assume different appearances, beginning with special sounds, hissing, crackling and roaring, and accompanied by diplopia, etc., or by nausea and vomiting, which precedes the vertiginous attack. M. Marinesco has studied the degeneracy of the nervous cells following section of the nerves, and they present two kinds: First, the colored granulations of the protoplasm, made evident by methylene blue, disappear, the axis-cylinder remaining intact. This lesion is slight, and the granulations may be re-formed. Subsequently the fibrillar protoplasm of the cell is affected, in its turn the axis-cylinders become atrophied, and the lesion is irreparable. Then the name of ascending neuritis should be replaced by that of distant neuritis. M. Laborde presented a frog, upon which a new curare, whose effects he has studied in conjunction with M. Duquesnel, exercises a preventive and curative action upon toxic tetanus.

M. Abelous produced experimental nephritis in an animal, by the direct action upon the kidneys of the nitrate of silver. He established all the physiological symptoms of uræmia, combined with gastric troubles, all of which ceased when the epithelium of the kidneys was reconstituted. M. Albert Mathieu communicated the result of his researches upon gastric digestion in the healthy subject, after the approved meal of Ewald. He determined the fact that the quantity of fluid contained in the stomach was sensibly increased at the end of half an hour, and exceeded that of the liquid previously introduced, which he attributed to the salivary and gastric secretions; the stomach then began progressively to empty itself. M. Lamy has studied the vessels of the nerve centers in syphilis. He found that the primitive lesion was always peri-vascular, especially in the arteries. When the subjects succumbed to a secondary infection he observed, on the contrary, intravascular inflammatory conditions which provoked thrombus, but these lesions belong rather to an infection of the blood than to the syphilis. M. Rénon reported the experiment upon a rabbit which became affected with Pott's vertebral disease, due to intravenous injections of the spores of the aspergillus fumigatus. The animal was taken with paraplegia, resulting from an abscess of the rachidian canal, involving the medulla, and after death the aspergillus was found in the pus of the abscess and in the vertebræ. MM. D'Arsonval and Charrin recalled the fact that they had already demonstrated the fact of the attenuation of the virulence of toxines, especially those of diphtheria and of pyocyanic disease by the action of electric currents, and that this modification of virulence was independent of any chemical action exercised by the current. M. Oeschner de Corimck addressed a note upon the analysis of the urine of subjects of rachitis, and described his process for detecting the free and compound sulphuric acid, and the total of sulphur. M. Roger reported having observed twenty-four cases of tuberculosis in the paroquet, which shows the frequency of this disease, and that it should especially engage the attention of the hygienist from the point of view of contagion. The tuberculosis occupies the tongue particularly, hence the greater danger of its dissemination. It presents the same histological characters as the human.

ACADEMY OF MEDICINE.

Contagion of Tuberculosis in Hospitals.—M. Jacoond reported three observations of robust men, without any hereditary antecedents, who entered the hospital for wounds of the thorax, and had become tuberculous. The origin of the contagion from the hospital was absolutely certain in one of the cases, and almost certain in the other two. Since 1890, M. Jaccond had called attention to this danger, and had insisted upon the necessity of a complete separation between phthisical subjects and those affected with other diseases, which would also be more advantageous to the former themselves. Secondary infection by the pueumococcus, streptococcus and staphylococcus, aggravates the disease, and takes away every chance of cure. All the efforts relative to the isolation of the tuberculous having been, up to this time, a dead letter, it is at least desirable to have better hospital hygiene, and particularly to suppress the dust in hospital wards. Such measures, while being acceptable and more easily realized, would afford a substantial security.

M. Duguet recalled the fact that in his hospital service the varnished floors are not swept but washed, and curtains are suppressed. The chairs and tables are so constructed that they may be washed, and their new material is much less expensive than the old. The spittoons, too, are of glass, and kept half full of water, to prevent the expectoration from drying. We here append a note by the editor of *Le Progres Medical* in relation to this subject. He says: "We earnestly beg all those who are interested in the question of hospital hygiene, to visit at Laraboisiere, the service of M. Duguet, where medical antisepsis is realized by very simple means, also very sure and economical. It is equally interesting to recall the fact that this question of hospital tubercular contagion, now being discussed by the Academy, has become an article of faith among the people. But few months have passed since we saw the employes of a large railroad company that were affected with grave diseases refuse positively to enter a hospital because it contained consumptives." M. Nocard showed by many examples the frequency of tubercular contagion. He believes that however excellent the precautionary measures against dust may be, it is very dangerous to associate tuberculous patients with those having other diseases. Prophylaxis of tuberculosis should be exercised not only in hospitals, but in common schools and other public places. M. Fèan discussed the predisposition to tuberculosis created by traumatism, He insisted upon the danger of contagion by dust of those who had been operated upon, not only of tuberculosis, but of other diseases. Besides the precautions against dust in this respect, the construction and management of hospitals are very insufficient. He believes in the excellent effects of isolation. M. Tarnier said that in saloons nothing is more difficult than protection against dust. M. Montpallier fears dust especially. He does not deny the possibility of hospital tubercular contagion, but believes it to be relatively infrequent. M. Tarnier showed how difficult it often was to establish the associations of contagion in large cities, particularly in a disease of such slow incubation and evolution as tuberculosis. In the country and the provinces the contagion is easily demonstrated. It would be most desirable that this interesting subject should be continued to be discussed at the next sitting, especially if it might result in practical modifications of hospitals.

MEDICAL SOCIETY OF THE HOSPITALS.

M. Charrin, from a recent observation of a case, distinguished the delirium accompanying Bright's disease, with cardiac complication, from the auto-toxic delirium resulting from certain hepatic affections of an infectious nature. M. Faisan reported the case of a tuberculous patient who, in consequence of an injection of 140 c. c. of oil containing 9 gr. of creosote, showed symptoms of meningitis, which disappeared in a few days. M. Burlureaux cited analogous cases, and added that the accidents observed by M. Faisan are sometimes produced, they are of a grave character, and should consequently be considered in this method of treatment. However, they are extremely rare, never mortal, and when contrasted with the benefits to be derived from this mode of administration of the creosote may not be contra-indicated, nor are they ever produced when the doses are diminished, but then the results are less certain. M. Faisan is convinced that the accidents mentioned by him are not sufficient to contra-indicate his method, but it is important to know whether or not the method is good. There is a tendency to administer creosote to all tuberculous patients; in many it seems to be contra-indicated and hurtful; he has seen marvelous results from the use of cod liver oil in large doses. M. Ferrand saw two cases in which the administration of creosote was deplorable. M. Lereboulet: It is certain that creosote is only suited to the forms of phthsis that are slow, torpid and scrofulous. it is contra-indicated where there is a tendency to congestion or hemorrhage, and when the patient is subject to hemoptysis. Except in such cases creosote is a very good remedy, not a specific, but adjuvant to the other hygienic means that are generally accepted.

SURGICAL SOCIETY.

Extra Uterine Pregnancy.—M. Chaput distinguished the different forms of extra uterine pregnancy, as indicated by M. Segond, and explained his method of solving the different conditions of which this affection is susceptible, and also of becoming the subject of surgical interference.

M. Bouilly shared the opinion of MM. Picquè and Segond. The discussion considered two points, especially the difficulty of diagnosis, and the treatment of the different cases that present themselves. After the expiration of three months, the difficulties of diagnosis disappear before the clear indications for operative interference; the same when rupture has occurred. Then prompt action is necessary. Hemorrhage, with slight effusion, may occur, and be accompanied by grave phenomena, which may cause errors of diagnosis and of treatment, and also the performance of a useless laparotomy. In other cases, intervention does not seem to be indicated, as when there is a hemato salpinx, but under these circumstances, the diagnosis is ordinarily easy, as the symptoms are prominent. After rupture, the blood that has escaped into the peritoneal cavity undergoes few modifications, the same after four months, so it is not necessary to depend too much upon the spontaneous reabsorption of the effusion. Extra uterine pregnancy, in process of evolution, should be removed, as though it were a tumor, whatever the date of the pregnancy may be. M. Chaput reported a case in which cholecystenterostomy was performed. It occurred in a woman who had an intense icterus; diagnosis, biliary occlusion without dilatation of the vesicle; laparotomy; vesicle contracted upon a calculus; cholecystenterostomy on the convex surface. Murphy's button was tried, but the vesicle being too small, suture was substituted: cure; ten months after the patient continued well. M. Chaput insisted upon the advantages of the lateral incision in operations upon the biliary passages. Every operation that overcomes biliary stasis, is a means whereby the biliary passages are aseptised. Cholecystenterostomy produces this effect, which heretofore has been credited to cholecystostomy, and it has the advantage of not causing a persistent infirmity. M. Quénu insisted upon the advantages of the median incision, which can be enlarged by another made horizontally. The exploration of the choledochus is certainly useful. M. Terrier: Much might be said upon M. Chaput's communication. He has proposed a number of problems, which he has not solved; an anastomosis should be made wherever it is possible, with the stomach, if one can do nothing better. When the bile is infected, it is difficult to know what is best to do, no conclusions can be established, because we are not sufficiently informed to make them. The incision in the L form removes all difficulties, and the adipose condition of the patient should be taken into account. M. Chaput: The lateral incision seems to be preferable. M. Quénu presented cultures obtained from the fluid of hydatid cysts of the liver. A patient had gastro-intestinal symptoms, caused by hydatid cysts of the liver; it was punctured. Inflammation supervened, and laparotomy became necessary. The fluid contained bacterium coli, from the biliary passages. M. Michaux reported a similar observation; the biliary passages were in direct communication with the interior of the cyst. M. Terrier also cited an analogous case.

SOCIETY OF HYPNOLOGY AND PSYCHOLOGY.

M. Wolff, in the name of M. Milne-Brammell, read before the Society a paper upon the cure of obsessions by suggestion. M. Berillon presented a case of passional obsession, successfully treated by suggestion. The patient, aged thirty-seven years, had been abandoned by his wife, and since her departure he became possessed with the desire to recover her. He lost his appetite and sleep, and made several attempts to commit suicide, and from having been previously sober, he took to drink and consumed from twelve to fifteen glasses of absinthe daily. His very great susceptibility was utilized for his treatment, and after certain suggestions, while in a hypnotic condition, he was relieved of his emotional ideas as well as of his intemperance. It may be remarked that the patient was in such a condition of mind as prepared and impelled him to the commission of crime. M. Aug. Voisin observed at La Saltpetrière a rapid cure by suggestion, of a case of lypemaniac insanity, with hallucinations and ideas of persecution, during the course of a broncho-pneumonia.

The patient became affected with aphasia, agraphia and verbal incompetency, all of which disappeared as the result of treatment. This observation is interesting, as it is in opposition to those who deny the utility of psychopathy in insanity. M. Berillon called the attention of the Society to a miraculous cure of sycosis, the observation of which was communicated by Prof. Kogevnikoff to the Society of Neurology and Psychiatry of Moscow. A bacterial affection, considerably developed, and that had resisted treatment for nine months by eminent specialists, rapidly disappeared from auto-suggestion. M. de Schrenck-Notzing reports in minute detail three observations of hereditary homosexuality, cured by hypnotic suggestion, the cure lasting for three or four years. The following were the gradual purposes of the suggestion: First, to combat homo-sexual sensations; second, to produce hetero-sexual sentiments; third, to promote the habit of coitus; fourth, to induce these unfortunates to marry, in order to materially confirm the new habit and the new social conditions, and thus prevent relapse. It was necessary to repeat the hypnotic experiments 204 times to effect the cure in two cases of married individuals, and 142 in others. J. A. C.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Abortive Treatment of Syphilis.—Larrieu (*Rev. de Therapeutique Med.-Chirurg.*, 62 Annee) states that under the treatment he describes he has never seen secondary symptoms follow a chancre. First, superficial cauterization of the chancre is practised by means of Vienna paste. Second, rubbing the mercurial ointment into the groins. Third, the taking, for thirty-five days, of three to five drops of tincture of iodine every morning.

Cold Bathing During Menstruation.—Dr. Depasse (*Gaz. de Gynecologie*) says cold bathing during menstruation is a beneficial measure, provided women accustom themselves to the treatment by bathing every day for at least eight days before the arrival of the period, when they can continue during the menstrual flow without any danger. In the case of a very anæmic girl, in whom this treatment was instituted, it gave most satisfactory results. Houzel, before the recent Boulogne congress, held that cold salt water baths facilitate the menstrual flow, increase the duration of genital life, and likewise increase fecundity in a remarkable manner.

Treatment of Diphtheria with Behring's Serum.—After treating a large number of cases at the Mariahiefer hospitals of Aix-la-Chapelle, F. Wesener (*Muench. Med. Woch.*, 1895, 853 and 883), in an excellent paper, in which a large number of cases are well observed and analyzed, comes to the following conclusions (*Pedriatics*):

In simple pharyngeal diphtheria, serum therapy alone will do no more than a properly applied local treatment, nor will it do less. It prevents apparently the extension of the process to the larynx better than local treatment, but it does not prevent with certainty the occurrence of sepsis.

In laryngeal diphtheria a tracheotomy or other treatment for stenosis is somewhat less frequently necessary with the serum treatment than with other methods.

In laryngeal diphtheria the serum treatment prevents the extension of the disease to the trachea and bronchi better than any known remedy. If, however, these parts are already involved, it is very doubtful if the serum will be of benefit.

When sepsis is present, serum will be of little benefit, even less than other methods of treatment.

It is not positively established that serum has immunizing powers.

The serum treatment is not harmful.

New and Successful Treatment of Acne Pustulosa.—Dr. Samuel G. Dixon, of Philadelphia, reports in the *Medical World* a distressing case of acne pustulosa successfully treated by him with new agents. The entire neck and face were involved, and the discharge from the pustules terribly annoying. The trouble was of six years' duration, and all treatment had failed to give relief. The author, after making his examination, thought that it might be possible to so change the general or special metabolism in this case, possibly stimulating it here or retarding it there—he cannot exactly say in what way or to what degree—that the factors which kept up the inflammatory condition of the skin and its glands would become inactive, and the disease thus cease for want of a cause. The treatment adopted in accordance with this idea was as follows: 0.4 c.c. of a saturated solution of taurin diluted with three parts of alcohol were injected hypodermically into the left arm, and two days later twice this quantity, not so much diluted, was administered in a similar manner. The only instructions given to the patient were that he should observe the same precautions as to diet as had been advised by his former physicians, and that twice a day he should bathe his face and neck with water as warm as could be borne, in order to remove the discharges from the skin as rapidly as possible. Eight days after the first injection a decided improvement in the patient's condition was noticeable. The pustules were not discharging so freely, and the inflammatory condition of the face had markedly subsided. He stated that his appetite was improved, that his constipation was gone, his bowels moving regularly and easily every day, and that he was feeling better in every way. At this time 1.5 c. c. of a saturated solution of taurin and thiosinamin combined were administered, and similar injections were made several times subsequently at brief intervals (from four days to about a week). After three months of this treatment not a single active pustule was to be found, and the patient remained free from the disease. A diluted solution of the remedies was then applied locally twice a day, and the skin was improving in smoothness and color. The injections were nearly all made in the left arm. The taurin used was prepared by the author from the bile of dogs. The solvent used for both agents was alcohol.* The author believes that while the cure was probably materially hastened by the use of the thiosinamin, good results would have been had with the taurin alone, for improvement was noticeable at the very beginning of treatment, when it was employed by itself and in diluted solutions.

Phthisis Cured by Strychnine.—The following case, described by Dr. William Pepper, in the *University Medical Magazine*, December, 1895, is remarkable as having recovered apparently under the influence of remedies acting almost entirely upon the nervous system, thus tending to confirm Dr. Thos. J. May's theory of the origin of consumption. Strychnine nitrate (1-1000 of a grain) with atropine sulphate (1-1000 of a grain) was administered every two hours hypodermically, together with strychnine nitrate (1-50 of a grain) and the double chloride of gold and sodium (1-12 of a grain) by mouth every two hours. After a few days the dose of the latter was increased (1-8 of a grain). Egg albumen was well borne, and this was increased until two dozen eggs (whites) were consumed per day. Cod liver oil inunctions and passive massage were employed once daily. When the patient showed signs of strychnine intoxication the dose was reduced. Dr. Pepper concludes as follows:

"Noteworthy points in this case are: The sudden onset, quite like general miliary tuberculosis; the large number of bacilli; the rapid recovery, all the more remarkable with a pronounced tubercular family history; the complete disappearance of consolidation and bacilli; the acute reappearance after two years of the whole train of symptoms, with signs in the base of the left lung, directly following an attack of pneumonia located in that vulnerable part; the large number of bacilli and their early complete disappearance in the second attack; the abatement of the consolidating process, and rapid recovery of the general health after the second attack; the absence from the treatment of all cough medication and antiseptics, and the large doses of strychnine nitrate and the double chloride of gold and sodium, with which the system was kept literally saturated."

Cold Applications in Pneumonia.—The rationale of this treatment is thus explained by Dr. Thomas J. Mays, in the *Times and Register* of December 7, 1895:

"The therapeutic indications in the management of pneumonia are, therefore, as follows: (1) Suppression and limitation of the process of exudation. (2) Support of the nervous system, and particularly of the pulmonary nerve supply. (3) Reduction of fever, and (4) maintenance of the function of the heart.

"Now, what part does cold play in filling these indications? It cannot fill them all, but it covers those of greatest importance. First of all it reduces the pyrexia, strengthens the pulse, tones up the heart, diminishes the pain in the chest, alleviates difficulty of breathing, and gives greater general comfort to the patient. It is capable, however, of doing a great deal more. In virtue of its power to stimulate nerve functions, and to contract small blood vessels, it promotes the pulmonary circulation, relieves stasis, hasten resolution, and disperses the products of exudation. Strychnine in large doses to sustain respiratory and cardiac innervation; concentrated food of the most nourishing character, like fresh beef juice, milk, brandy, etc., to support the constitution; digitalis to maintain the heart; oxygen by inhalation to relieve the breathing; morphine to produce sleep; ice-cap to the head to diminish restlessness; and strapping of the chest in case of great pleuritic pain, are some of the agents which will fill most of the remaining indications."

E. Guernsey Rankin, M.D., will remove May 1st to The Madrid, 180 West Fifty-ninth street, Central Park South.

A law has been passed in this State raising the course of medical students to four years, and allowing students who have entered college to be graduated under the rules in force when they matriculated.

RETROSPECTIVE DIETETICS.

Spices as a Cause of Hemorrhoids.— A writer in the *Doctor of Hygiene* says: The Dutch custom houses of Java shed an important light upon most of the unknown and unstudied natural laws involved in the cause and cure of hemorrhoids. In order to perpetuate the high commercial repute of spices and other products of that island, the government usurps an absolute control over them, at least, so far as regards their purchase and sale. It monopolizes the purchase of the whole product, and prohibits the natives from selling anything whatever to strangers. Prior to exporting everything is rigorously inspected. The inspection of spices requires that they should be tasted. Knowing that their juices are poisonous, the inspectors never swallow the minutest particle of them, but immediately eject them from the mouth. Nevertheless, after a certain length of official service, these spice inspectors become the victims of the most aggravated cases of piles which have ever been known to the medical profession. Although no fragment of spice is swallowed, the current of saliva forever passing from the mouth to the stomach carries with it enough of the irritating juices of the spice to fearfully disturb and derange the whole alimentary canal. A prolapsus of the rectum ultimately ensues, extending sometimes four or five inches, exposed surfaces highly inflamed, and intensely sensitive to the touch.

The simple and negative system of cure they adopt is to withdraw from duty and to observe a strict abstinence from the tasting of spice. Without other remedy, the patient after some months is cured, and returns to duty, but only to relapse from the same cause after a time into the same malady. He thus oscillates between health and disease during his entire official existence, which we cannot suppose is distinguished for its longevity.

Poisoning from Dried Beef and Pressed Chicken.— Two cases of poisoning from decomposing animal food have recently occurred in Michigan (*Mod. Med*). Both cases were reported to the State Board of Health, and placed in the hands of Prof. Vaughan, Superintendent of the Laboratory of Hygiene at Ann Arbor, for investigation.

In one of these cases a number of persons residing at Somerset Center, Hillsdale County, were poisoned by eating dried beef. Prof. Vaughan reported at the last meeting of the State Board of Health that he found on investigation that the meat contained a small germ, which, when injected under the skin of rats, guinea-pigs and rabbits, produced death in twenty-four to forty-eight hours.

In the other case of poisoning, which occurred at Sturgis, 200 hundred persons who ate of pressed chicken at a banquet were poisoned. The bacteriological study of the sample of chicken sent for investigation showed that it contained germs which, when injected into guinea-pigs, produced death, although they were not sufficiently virulent to kill rats.

Cases of this kind are becoming more and more frequent, indicating very clearly that persons who use flesh food must, under all circumstances, use extraordinary care to avoid serious or even fatal poisoning.

Diet in Tuberculosis.—Dr. T. J. McGillicuddy, in a paper read at a recent meeting of the New York Academy of Medicine (*Am. Med. Rev.*), advocated feeding and exercise in tuberculosis. His plan consists in giving at rather frequent intervals a considerable quantity of carefully roasted or boiled beef or mutton, raw eggs, stale bread, butter, sterilized milk and vegetables. After a few days of treatment the meat should not be less in amount than a pound a day, and the quantity of bread and vegetables should be even, if possible, somewhat larger. When there is a disgust for the meat diet the stomach needs special treatment, for a short time only, by the addition of a digestant, such as dilute hydrochloric acid and hot water to remove irritations. Exercise is added.

Digestible Food.—One of the biggest mistakes about food which people make, says the London *Hospital*, is to forget that the true value of food to anybody is in the measure of its digestibility. Half a pound of cheese is vastly more nourishing, as regards its mere components, than half a pound of beef, but while the beef will be easily digested, and thus be of vast service to us, the cheese is put out of court altogether for ordinary folks by reason of its indigestibility.

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* This must be a mistake, as taurin is insoluble in alcohol.

Food Value of Soup.—A French authority, M. Furitieres, says that soup, taken at the commencement of a dinner, causes distention of the stomach, most harmful to a proper assimilation of the solids that follow, and he endeavors to show that in the soup there is little or no nourishment. It is absurd, however, to assert that the stronger and richer purees do not contain a large amount of nutrition. They are, in fact, a meal by themselves, should be treated as such, and not be followed by other food, except, perhaps, a light repast of vegetables.

Enuresis of Over-Feeding.—According to Dr. J. P. Cobb, a very common cause of enuresis is the pernicious habit of feeding children too much proteid food. An excess of proteid food is not made use of by the system, but taxes the digestive organs to put it into less highly organized forms, to reduce it to excretory compounds. Much of this excess is eliminated by the kidneys as partially reduced peptones, imperfectly oxidized urates and allied compounds. A urine overloaded with these solids causes an unduly irritable bladder, the intrinsic nerve mechanism is subjected to unusually irritating impressions, and the reflex action of the lumbar center is more frequently and persistently invoked.

Ray Progress.—Thomas A. Edison[*] has at last announced the name of the new material which he has found desirable to use for fluorescent screens. It is tungstate of calcium, and it was selected out of all the chemicals in the laboratory after a long and careful process of experimentation and selection. The apparatus which Mr. Edison is using at present is simple. He has made a sort of field glass out of an old stereopticon, fitting it closely to the eyes, so that no light can percolate through around the edges, and in place of the usual object lenses he uses a plate of fluorite, against which is placed a sheet of paper covered with the tungstate of calcium in the crystalline form. . The crystals used are of small size, about half as large as the usual crystals of granulated sugar. Armed with this apparatus, he places any desired object between himself and the Crookes tube, and is thus able to see the picture of the object on the fluorescent paper. He has seen the bones of a man's hand, held up in front of the Crookes tube at a distance of fifteen feet.

Mr. Edison maintains that the physician of the future can study the internal organs of his patients at leisure by this wonderful invention. He suggests that a light-proof box be made, with the side next to the Crookes tube of quarter inch boards, and this entire side of the box covered with the screen of tungstate of calcium. The patient will be placed between the Crookes tube and the box, and the physician, entering the latter, can study the internal economy of his patient at his leisure. Mr. Edison says that he is about to institute a series of experiments to ascertain the effect of the X rays on the bacilli of disease, notably those of tuberculosis and diphtheria.

Nikola Tesla says in the *Electrical Review* that: I am producing strong shadows at distances of forty feet. I repeat, forty feet, and even more. Nor is this all. So strong are the actions on the film that provision must be made to guard the plates in my photographic department, located on the floor above, a distance of fully sixty feet, from being spoiled by long exposure to the stray rays. * * * Even now I see before me the possibility, not to say certitude, of augmenting the effects with my apparatus at least tenfold! What may we then expect? We have to deal here, evidently, with a radiation of astonishing power, and the inquiry into its nature becomes more and more interesting and important. Here is an unlooked-for result of an action which, though wonderful in itself, seemed feeble and entirely incapable of such expansion, and affords a good example of the fruitfulness of original discovery.

The effects upon the sensitive plate at so great a distance I attribute to the employment of a bulb with a single terminal, which permits the use of practically any desired potential and the attainment of extraordinary speeds of the projected particles. With such a bulb it is also evident that the action upon a fluorescent screen is proportionately greater than when the usual kind of tube is employed, and I have already observed enough to feel sure that great developments are to be looked for in this direction. I consider Roentgen's discovery of enabling us to see, by the use of a fluorescent screen, through an opaque substance, even a more beautiful one than the recording upon the plate.

Since my previous communication to you I have made considerable progress, and can presently announce one more result of importance. I have lately obtained shadows by reflected rays, only thus demonstrating beyond doubt that the Roentgen rays possess this property. One of the experiments may be cited here. A thick copper tube, about a foot long, was taken, and one of its ends tightly closed by the plate-holder containing a sensitive plate, protected by a fiber cover as usual. Near the open end of the copper tube was placed a thick plate of glass, at an angle of forty-five degrees to the axis of the tube. A single-terminal bulb was then suspended above the glass plate at a distance of about eight inches, so that the bundle of rays fell upon the latter at an angle of forty-five degrees, and the supposedly reflected rays passed along the axis of the copper tube. An exposure of forty-five minutes gave a clear and sharp shadow of a metallic object. This shadow was produced by the reflected rays, as the direct action was absolutely excluded, it having been demonstrated that even under the severest tests with much stronger actions no impression whatever could be produced upon the film through a thickness of copper equal to that of the tube. Concluding from the intensity of the action by comparison with an equivalent effect due to the direct rays, I find that approximately 2 per cent. of the latter were reflected from the glass plate in this experiment. I hope to be able to report shortly and more fully on this and other subjects.

I am finding more and more evidence in support of the theory of moving material particles * * * I have already a great many indications of a bombardment occurring outside of the bulb, and I am arranging some crucial tests which, I hope, will be successful. The calculated velocities fully account for actions at distances of as much as 100 feet from the bulb, and that the projection through the glass takes place seems evident from the process of exhaustion, which I have described in my previous communication. An experiment which is illustrative in this respect, and which I intended to mention, is the following: If we attach a fairly exhausted bulb containing an electrode to the terminal of a disruptive coil, we observe small streamers breaking through the sides of the glass. Usually such a streamer will break through the seal and crack the bulb, whereupon the vacuum is impaired; but if the seal is placed above the terminal, or if some other provision is made to prevent the streamer from passing through the glass at that point, it often occurs that the stream breaks out through the side of the bulb, producing a fine hole. Now, the extraordinary thing is that, in spite of the connection to the outer atmosphere, the air cannot rush into the bulb as long as the hole is very small. The glass at the place where the rupture has occurred may grow very hot—to such a degree as to soften; but it will not collapse, but rather bulge out, showing that a pressure from the inside greater than than that of the atmosphere exists. On frequent occasions I have observed that the glass bulges out and the hole through which the streamer rushes out becomes so large as to be perfectly discernible to the eye. As the matter is expelled from the bulb the rarefaction increases and the streamer becomes less and less intense, whereupon the glass closes again, hermetically sealing the opening. The process of rarefaction, nevertheless, continues, streamers being still visible on the heated place until the highest degree of exhaustion is reached, whereupon they may disappear. Here, then, we have a positive evidence that the matter is being expelled through the walls of the glass.

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[*] New York *Tribune*.

MISCELLANY.

—We promise as our hearts dictate—we perform as our fears advise.

—In order to succeed in the world one must make a show of success.

—Washington. Byron and Cavour, were all bled to death by their physicians.

—Dr. Thomas Keith, the distinguished ovariotomist, died recently in London.

—If on the first day the temperature rises to 105°-106°, the fever is neither typhoid nor typhus.

—The more faults we ourselves possess, the better it pleases us to remark on those of others.

—WARTS.—Cover them with a solution of salicylic acid, 1 part; lactic acid, 1 part, and collodion, 2 parts.

—It is said a spray composed of 1 part icthyol and 100 parts ether and alcohol acts as a specific in acute coryza.

—You need not tell all the truth unless to those who have the right to know it all. But let all you tell be the truth.

—The dangers of chloroform are met with on the operating table; those of ether, after the operation is completed.

—Cardinal Richelieu is said to have been the first chocolate drinker of any fame, and to have set the fashion of using it.

—The Esquimaux gives the doctor his fee as soon as he comes. If the patient recovers he keeps it; otherwise he returns it to the family.

—Dr. Homer I. Ostrom has opened a private hospital for the treatment of surgical, diseases at 127 West Forty-seventh street, New York.

—When a patient complains of dull pain at the back of the head, with lassitude and despondency, he probably suffers from excess of phosphates in the urine.

—A death is reported as having occurred at Guy's Hospital, from the use of nitrous oxide and ether. The patient was a married woman, aged twenty-six.

—Says the *Medical Record:* "The best symptom in any patient is prompt pay; as long as it lasts you need not care what else ails him, unless he is likely to die."

—The Illinois Supreme Court has decided that physicians cannot be compelled to report contagious diseases or render other services to the public without pay.

—Dr. J. A. Cantrell (Philadelphia *Polyclinic*) says that an ointment of 15 per cent. of salicylic acid in lanolin or petroleum, applied for three days, then curet the part, will cure warts.

—Sir Benjamin Ward Richardson says he has no doubt that, if men and women in general properly understood and steadily obeyed the laws of their being—physical, intellectual and moral—70 per cent. of them would reach the age of 110 years.

—Prof. Carl Barns has utilized the principle of the Æolian harp in computing the velocity of the wind from the pitch of the note observed in case of a given diameter of wire and temperature of the air.

—Cotton-root bark, exhibited in doses of 20 to 30 minims of the fluid extract, for several days, is said to be an excellent preventive of bleeding at the nose, spitting of blood, voiding blood in the urine, etc.

—Coester states that catheters or other vulcanized rubber articles, hard or soft, may be preserved for many years, or indefinitely, in fact, by keeping them immersed in a 3 per cent. solution of carbolic acid.

—The cities of New York and Berlin issue cards to physicians for the purpose of enabling them to pass unhindered through a cordon of police. This example has been followed by the City of Paris.

—A prescription for a hair tonic for an Egyptian queen, dated 4,000 B.C., has recently been deciphered. It directs that dogs' paws and asses' hoofs be boiled with dates and oil—about as sensible as some of ou modern prescriptions.

—Dr. Vassoli, in the *British Gynæcological Journal*, reports a case of six children at one birth. All the fœtuses were born alive and moved vigorously. The sexual organs were differentiated, four being males and two females.

—It was recently decided by Judge Smith, at the United States Circuit Court, in session at Battle Creek, Mich., that a physician's relations to his patients are not sacred, and that he can be compelled to testify in regard to the ailments with which his patient is afflicted.

—Dr. Coleman, of Columbus, in an address before the Legislative Committee of Ohio on the Kimmel Bill, gives the following statistics of the medical profession in the State: "Number of physicians 9,000, of whom 6,814 are regular physicians; 1,999 Eclectic; 678 Homœopathic; 150 physo-medical and 757 unclassified."

—Among the new alkaloids exhibited at the February meeting of the American Chemical Society in this city, were pure colorless crystals of calycanthine, the first perfectly colorless ones ever produced. They look exactly like diamonds, and refract light with all the beauty of the diamond. No other known artificially produced crystals have any such beauty.

—*Apropos* of woman's limitations as a doctor, the late Dr. W. C. Van Bibber, of Baltimore, used to tell this story: Awakened late one night by a ring at his bell, he called down the speaking-tube to know who it was. "It's I, doctor, Mr. ——. I want you to come at once to my wife. She is in labor." "Yes, but I don't attend your family. Why don't you go for your own physician?" And back came the reply: "I did, doctor—but she's about to be confined herself."—*Boston Medical & Surgical Journal.*

—In the forty-ninth registration report of Massachusetts the compiler presents the statistics of 203 persons who were reported as having died during the ten years 1881–90 at the age of one hundred and over. Of this number, 153, or 75.4 per cent. were females. By the State census of 1885, the number of females living over eighty years of age was nearly double that of males. The greater exposure of men to accidents, to weather agencies, to the constant strain of business life, to the anxiety of providing for a family, all tend to shorten the life of men.

—The date fixed for the next International Medical Congress, to be held at Moscow, is the week beginning August 19th and ending August 26, 1897. The Acting President will almost certainly be Prof. Klein, Dean of the Faculty of Medicine in the University of Moscow. Prof. Erisman, who holds the chair of Hygiene, has been elected General Secretary. Papers and discussions must be in either the French or German language; Russian has been excluded lest the Congress should become national rather than international, and English on the ground that it is a language little used or understood by other than Englishmen.

—The Directors of the Post-Graduate Medical School and Hospital have named one of their wards in memory of the late Dr. Charles Carroll Lee, who was for many years a professor in the institution. They have placed a tablet in the ward, giving the names of those who combined to contribute the $10,000, which was given for the purpose of the memorial. These names are as follows: Dr. Robert Abbe, Dr. L. Bolton Bangs, Mrs. James Beales, Dr. Stephen S. Burt, Miss Caldwell, Dr. Charles L. Dana, Dr. Bache McE. Emmet, Dr. George H. Fox, "A Friend," Dr. Horace T. Hanks, Mr. and Mrs. Eugene Kelly, Mr. and Mrs. Henry J. Lamarche, Dr. Daniel Lewis, Mr. and Mrs. William Lummis, Mr. and Mrs. Frank A. Otis, Dr. Clarence C. Rice, Mr. Eli K. Robinson, Mr. Nelson Robinson, Dr. D. B. St. John Roosa, Mrs. Eliza M. Sloan, Dr. Andrew H. Smith, Mrs. M. E. Sparks, Dr. Reynold W. Wilcox. It will be seen that the faculty of the institution participated largely in the memorial gift.

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ORIGINAL ARTICLES.

THE NATURE OF INFLAMMATION.[*]

BY HARRY HAKES, M.D., WILKESBARRE, PA.

THERE is no abnormal condition of the human system or of its various parts which calls for the physician's or surgeon's aid so frequently as the condition universally designated inflammation. Every organ, every tissue, from center to circumference inclusive, inside or outside, this process is liable to invade with grades of danger ranging from slightly noticed inconvenience and discomfort to immediately threatening death. How to meet and successfully avert the ultimate or unrestrained disastrous, or fatal consequences of this inflammatory process has been for ages past, and will be for ages to come, the greatest *desideratum* of medical art. What is inflammation? I can quote you many attempted definitions from both ancient and modern authors, but none of us are satisfied with any definition yet formulated. The problem is a difficult one, while increased observation and experiment as yet only push the conclusion we seek into deeper obscurity. Until recent times it was thought the question was sufficiently answered by a description of the more manifest symptoms, and a notation of some of the more apparent causes or agencies in producing or inducing inflammatory action. Again, it has been queried whether inflammation is a disease of the nervous or sanguineous system, and if of the blood, whether it is a general diseased condition, affecting at the same time every atom of the whole body; or only a local condition, say of the eye, and not as to the toes, the fingers, lungs, the brain, and not the stomach. Or, again, if it is a disease of the nervous system, must it of necessity involve the sum total of the nervous system or only a part, and a part also not be affected? We need not at this time pretend to enumerate all the theories that have been or are now entertained. But this much I assert with emphasis, that the practice of any teacher or writer will guide him largely to formulate a theory to prove his practice correct. How true this is in regard to the phlogistic theory and the anti-phlogistic treatment you can scarcely have failed to observe. Others, observing the deranged and diminished action of the secretory system, direct their whole line of treatment to increase the secretions, and obtaining some satisfactory result from that treatment, are ready to assert and maintain that the origin and essence of the disease is chargeable to diminished action of the secretory system, and thus show us quite a plausible philosophy. The same or similar conclusions are reached by those who direct their attention to the altered conditions of the emunctory system. I presume we should be prepared to witness the same conditions when a microbian origin of inflammation shall be asserted or assumed. And if it so shall be, and another bubble burst, to come and go, it will be neither the first, and probably not the last sad and disappointing experience.

Very early in the history of medical art four of the more commonly observed symptoms of inflammation were well known and described by Celsus, to wit: Redness, heat, pain and swelling. Not alone did that old veteran assume that in his short statement, but he gave a full and sufficient definition of the inflammatory process. It was standard for 1,500 years, and remained quite universally satisfactory for 250 years after the great discovery of Harvey, as perfected by Boerhaave and his co-laborers. From that period it became easy enough to formulate the phlogistic theory by embodying the four symptoms described so long before by Celsus. Before the discovery by Harvey of the double office of the heart, the oxygenation of the blood, and casting off the products or refuse of the internal human combustion, it does not seem possible that any reasonable theory for the inflammatory process could have been formulated—that is, reasonable to us, from our knowledge of anatomical and physiological facts. Inflammation for those hundreds of years must, however, have been just what it is today, and from the first advent of human beings on the earth. From the ripened fruit of Harvey's discovery there soon was hatched and formulated the phlogistic theory, and the anti-phlogistic treatment of inflammation. Understand me, I am not now speaking of inflammation from traumatism, nor from specific causes, as smallpox, erysipelas, measles, etc., but what has generally been represented or called idiopathic inflammation. Latterly the term "infective" is proposed in the place of idiopathic. I do not like the change, for the word infective will not express the general fact as well as idiopathic. It is too limited in its application, just as idiopathic is the contrary. I shall have occasion again to speak of this further on. I will now put the case this way: To-day an individual is in perfect health as far as known. You are called in to-morrow and find him with a pneumonia, phrenitis, nephritis, carditis, bronchitis, gastritis or other "itis." We may waive dispute as to the idiopathic and infective names, as also for the present the causes, either probable, possible or real, for that is not the conundrum proposed. What is inflammation? What is its nature? In what, of what, does it essentially consist? Can we discover the nest egg or original factor among all the organs and parts, fluids and solids, or from or among all the various functions? Can we name the place from whence the symptoms arise and proceed? In law, frequently, the grand question is, who struck the first blow that in the *melee* terminated in the killing of a man? Not unlike it is the problem now proposed—what organ, what system, what function first balked or kicked, and thus deranged the whole machine and engendered the state we call inflammation? And again, was the cause from within or without? At a single glance you see it is a case of inflammation. The throbbing heart, the increased rapidity of the sanguineous flow, the rapid respiration, pain, etc., help to make your diagnosis—most certainly the present symptoms were not present at the beginning. By inquiry you learn what you would be pretty safe in assuming to know, that the present symptoms were preceded by a chill or rigor, a sense of coldness, not heat; a feeble pulse, a sense of general contraction, not expansion. The first noticeable symptom or changed action of the sanguineous system is of diminished and decreased action. The heart beat is feeble, the arteries reduced in size, the pulse beat known as small and wiry. The starting point, so far as we can observe, appears to be a shock to the nervous system, as manifested by the chill. The reaction from that is the unnatural and increased performance of the sanguineous system, acting in response to the command of nervous influence and excitement. The question forced upon us is this: Does the train of symptoms first inaugurated follow each other in the relation of cause and effect?

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[*] Read before the Luzerne County Medical Society.

It is scarcely to be doubted that the primary or first symptom of the train to follow is observed as some offence to the nervous system. This is certainly the case as regards inflammation from direct injury or traumatism, nor is it much less certain as to what we call idiopathic inflammation. Nervous shock and pain from direct injury are too manifest, too often observed and experienced, to require more than mere mention. For sixty years the poor frog, rabbit and dog have been the subjects of endless experiment, for the purpose of throwing some light upon the process and nature of inflammation, to what insignificant beneficial results medical men as well as laymen can abundantly testify. A frog is not a man, nor is a man a rabbit. Should we attempt to mutilate a man as we do a frog, the man would probably manifest some qualities and symptoms which the frog does not.

The volumes written to describe, and the diagrams to illustrate, what takes place in the second and later stages of the inflammatory process never have, never will, and never can give us the knowledge which we so much desire as to the essential nature and the operations of the first factor in indiopathic inflammation. The greater of these herculean labors and wonderful experiments have been to show us the manner in which the blood substance departs from the congested capillaries. Blood substance, in health, is always passing out of the capillaries for the nourishment and the growth of all the tissues and organs. In inflammation the only difference is that there is a superfluous amount thrown out, which, unappropriated by the process of natural requirement, becomes foreign matter and an offence to the regular and natural performance of healthy function. A blister applied to the cutaneous surface will cause the same material to pass through and out from the capillaries. The fact is everything, the modus is of inferior consequence. Discoveries subsequent to congestion and effusion are entirely too late to give us correct ideas of the nature of inflammation, or to indicate a theory from whence we may found a preventive or curative practice. If the natural, anatomical, physiological and psychological conditions of a man and the frog were more nearly alike the experiments would be of much more value.

But what do we observe in idiopathic inflammation? Lassitude, a sense of uneasiness and discomfort, more or less manifest, but the chill or rigor is the emphatic indication of the impending inflammation. In fact, it alone is pathognomonic, positive and unmistakably certain. In the more violent shocks to the nervous system, from whatever cause, the chill or rigor may be so severe and desperate as to paralyze the sanguineous system to that extent that reaction does not follow, and death ensues. In such a case it is termed death from shock, whether the cause is injury or traumatism, or idiopathic, as from exposure to cold. The ability of the sanguineous system in health to perform its work efficiently, or in disease to perform curative work, depends upon its supply of nervous energy. If, therefore, by a severance of the nervous system, or its paralysis from toxic cause or chill, the tonicity of the heart and arteries ceases, death is inevitable. Just as certain as that day follows night is chill followed by an increased activity in the blood circulation, by a sense of increased heat, a more rapid respiration, congestion of the capillaries, exudation of blood substance, with a tendency of the morbid action to some particular vital part or organ. Upon what rule Nature makes her selection of organ or region for exudation and possible necrosis, we do not know. Redness, pain, swelling and impaired function give us to undertand the part she is selecting or dooming for necrosis. Possibly the effects of the first shock to the nervous system upon the secretory or emunctory systems have been too lightly estimated, for it is certain that from the period of chill the secretions are arrested, as also the emunctory function. These of themselves must rapidly produce dangerous, if not fatal, results if protracted.

Our remarks upon the necessity of constant nervous tonic supply of energy to the whole sanguineous system applies with equal force to the secretory and emunctory systems or functions. Both the latter must be taken into account in our estimate of the nature of the inflammatory process. The orderly and healthy performance of natural functions in man is partly governed by the laws of physics and chemistry, but not entirely so. Beyond the power of natural vision or our greatest multiple of the same by microscopic aid, beyond our widest range of observation, experiment, or delicacy of test, we are impressed that there is still an unseen power, in constant and efficient operation, which the human mind has hitherto been unable to exactly appreciate, examine, explain or understand, and unable to formulate to a rule. It has been called vital power, vital principle, etc. It is this unknown quantity that knocks us on the head when we cannot understand how we lost our patient. Our nearest approach to an understanding of these unseen forces or powers is like the search for infinity. There will still remain, like the gauze curtain dividing life from death, a separation of scarcely tangible texture, penetrable to spirit only, impervious to physical sense, and yet we feel impressed by the magic power, conscious that *our* secret thoughts are known and judged by the mystic power so awfully near, just behind the screen. Impassable and charming barrier, precious contiguity! Here the best men of our profession and race have presented themselves by day and by night, sleeping or waking, waiting, watching, praying for one glimpse beyond the curtain, the abode of verity, the home of ultimate truth. Failing in this direction to discover the origin of first causes, we fall back upon our own finite and limited resources and forge the phrase "vital," only another word for the unknown and possibly unknowable.

The grosser forms of injury to the nervous system that are most common in lighting up the fires of inflammation we can easily appreciate and understand. But there are other causes or injuries less manifest to our senses and observation, and yet are most potent and powerful to produce the gravest and most formidable forms of inflammation; so very idiopathic, indeed, that they range above, beyond, outside and independent of the ordinary range of so-called idiopathic causes. And right here is where the frog theories cease to have for us any value. A physician need not to practice very many years to become convinced that undue emotions, peculiar to human beings, giving but feeble outward signs, may rack the frame from center to circumference, dethrone reason, defy all rules, disturb the very soul's repose, and produce the train of symptoms of inflammation, directing the course to the most vital parts, leaving the body partially intact, first robbing it of all that makes life valuable or existence tolerable. The nature of inflammation cannot be compassed and formulated definitely, except by investigation of its various causes, its phenomena or progressive course of development, its tendency, unobstructed by art and by modification produced by treatment. The sole object of our investigation into its nature is designed for its aim and end to direct us to the best course of treatment for its abatement and cure. The formulating of our theory is our first step in that direction. The proving of our theory is by obtaining satisfactory and successful results from the practice indicated by our theory. If another theory and another practice produces better results we are bound to distrust our theory—nay more, we should say cast aside our theory and abandon our doubtful practice. Partisanship in medical theory or practice is a cruel and wicked taskmaster. In the presence of disease and impending death we ought to feel solemnly reminded of the obligations we owe to truth, and the greatest of all obligations, charity toward the opinion of others. Sink or swim, win or lose, God grant that we may enjoy the comfort and consolation of this heavenly grace. So, gentlemen, when I have, in relation to this subject, appeared an enthusiastic supporter or advocate of the anti-phlogistic treatment of inflammation, you must understand me as referring to what I call idiopathic inflammation, and by no means to what I call inflammation from specific causes. The early recognition of inflammation from specific causes, as smallpox, measles, erysipelas, and the blood poisoning products of traumatic and idiopathic inflammation, led to what received the name: "The Humoral Pathology." That is a branch of our general subject which I will not follow in this dissertation further than to say that inflammation, from such specific causes, is still essentially inflammation, in all its phenomena and consequences, as idiopathic inflammation, but that its proper treatment is as far from it as is the North Pole from the South Pole. Inflammation is not a disease *per se;* it is a natural process for the repair of injury, for the elimination of specific toxic matter that has reached the blood circulation, or it is the penalty and compensation Nature demands for an immediate. preceding injury or affront to the nervous system. In a state of health there is an equilibrium or equipoise of all the vital functions. Injury to one disturbs all; is appreciated and resented by all. To acquire, repossess or regain the natural status is alike the business of Nature, and the object of the physician. As in law punishment may appear enormously in disproportion to the offence, so in the inflammatory process, once the fire is kindled, medical art will have performed full duty, if it can moderate and modify the superfluous and excessive natural impulses, preventing undue effusion and its train of disastrous consequences. Among doctors, as well as laymen, the most universally assigned cause for idiopathic inflammation is suddenly changed temperature, general or local, generally also from heat to cold, aggravated by moisture. Waiving the preliminary symptoms of sneezing, increased action of the lachrymal glands and the stoppage of the secretions, yawning, lassitude and general undefinable discomfort and uneasiness, the first unmistakable symptom of impending inflammation is the chill or rigor. That is the alarm gun for the coming struggle. The severity and duration of that chill or rigor conveys fair warning of the part the sanguineous system will take in the battle. The rigor or chill denotes the offense to the nervous system; it is the lightning's flash, but the heart and arteries will respond in crashing thunder. The former is the gathering of the waters, the latter is the roaring flood.

Any discussion of a microbian cause of idiopathic inflammation is yet premature. What facts may yet be found or what theory based thereon, I do not know and cannot pretend to forecast. So far as treatment throws any light upon the nature of inflammation, it must depend upon the kind of treatment given. Here, unfortunately, we are by the ears. My argument would be based upon my treatment and your argument upon your treatment. As to the products of unchecked inflammation and the ultimate consequences of such products we ought not to disagree, nor in that estimate should we overlook the barricading of the watchful, faithful guardian cells—to protect the system from universal infection and contamination. There is a field in the plan of treatment, yet to be cultivated, relating to the stage of chill, or even before chill actually begins. After the chill we know full well what will come next. But before or during the chill cannot something be done to appease the nervous system, or allay its severity and duration, and if so might we not reasonably expect a modified or less rampant condition of the sanguineous system? Possibly some anæsthetic, either known or that may be discovered, that administered at that early stage might so act upon the nervous system as to abort the natural train of symptoms that always follow.

My theory and practice is grounded upon a direct attack upon the sanguinary system. Of course, the physician takes each case as he finds it; too often not until the chill has gone and the heart and arteries are going at high pressure. Even at this stage may not the nervous system be forced to withdraw the vigor of its impelling force to the circulatory system? I well know the importance, advantage and utility of early venesection. The period for its great utility is before effusion takes place, just as a pail of water will stop an incipient fire, which neglected for a few moments will defy a torrent of water. Neither phlebotomy nor any other medical treatment is of much promise after the stage of thickening of the serum, muco-purulency, ulceration, formation of pus and gangrene.

The disasters wrought by the inflammatory process, as observed during life, and as revealed by post-mortem examination, are referable entirely to undue or excessive natural work of the sanguineous system. Whether any course of treatment directed solely to the nervous system in inflammation subsequent to effusion will prevent the morbid changes that must occur from excessive vascular action may well be doubted at the present stage of medical knowledge. Whatever line of treatment is adopted to prevent dangerous or fatal results from the inflammatory process, should be directed to the prevention of deposit, of whatever abnornal character, by the blood. I often hear some of you remark, somewhat guardedly, that perhaps in well selected cases phlebotomy may be performed with advantage. Were this the result of practical demonstration it would be much more to the point. This admission, so far as it goes, is consonant with the anti-phlogistic theory; but is only grudgingly permissive. Those who would successfully teach, must *direct*, not permit. Once for all, I must beg to suggest that, in this behalf, individual experience alone qualifies to speak with authority. This qualification only will properly fill the expectation of students of medical art.

There are cases enough where we can make daily visits and wait with patience and hope that something favorable will turn up, but an acute inflammation of a vital organ or part is not that kind of case. Fortunately, simple serous effusion may often become absorbed, taken up and removed by natural processes; *less often*, if it becomes muco-purulent, indurated or pus, and wisely so, for in the latter changed condition, unless the watchful cells shall have erected their barriers to prevent it, absorption develops an infective inflammation many times more dangerous than the original. Whether this last is more properly called hectic fever, or fever from infection, or secondary inflammation, or specific inflammation, matters little, so far as a name is concerned. Muco-purulent, or pus quantities, should be visited as soon as detected, *wheresoever located*, by lancet, bistoury, trocar, or needle and pump.

The word *inflammation*, from "*flamma*," is not well chosen to express the cause, nature or initial factor in that process. It sub-dates the beginning of the disturbance, and directs our attention to a single symptom of the secondary or consequential stage of the abnormal process, to wit, a sense of increased heat—largely a false impression, for the real increase of heat makes but feeble impression upon the thermometric scale. The term inflammation, however, has been so long and universally in use that it would be difficult to provide a new word to take its place. Perhaps this is a proper place to allude to another closely allied condition universally designated *fever*. The prominent pathognomic symptoms of these two abnormal conditions have such a resemblance, and are often so difficult to differentiate, that an idea of a common or similar origin is forcibly suggested, notwithstanding a thousand authors and teachers have given us to understand otherwise. The word *fever*, from fire, as well as *flamma*, designates and represents in either case the sense or feeling of increased heat, whether real, or only apparently or seemingly so. Neither of the terms relate to the primary origin of the symptoms, or give any idea as to the initial or starting point of the *flamma* or the fever. Even such terms, however, are not destitute of ability to constantly impress our *attention and curative efforts* in possibly a wrong dirertion. I earnestly ask you, gentlemen, to carefully and thoughtfully interrogate yourselves as well as medical writers as to this. Other words coined or selected at this late day I am aware would need the approval or fatherhood of a demigod. The word hazel, without the prefixed witch, is merely an indifferent bush, but witchhazel is magical for ever. Stand by the dicta of the fathers, though the heavens fall. That is just as appropriate, and just as inappropriate, in medical art as in law, philosophy or theology. Perfection in these branches of human knowledge seems apparently as far distant now as in the long ago. Our experience and observation teach us, if they teach us anything, that in all these matters there is a possibility that there may be a restatement of general principles along these lines. It were idle to deny that there has been improvement, but the final, the ultimate, has yet to be said and written. In the main, men are born and die the same as of yore. Those who do not die we claim to have saved by our art, but first or last all die, just as from the beginning. *Vis medicatrix naturæ*, we may personify as of comely countenance, of gentle mein, a most welcome and unseen visitor, whether men wake or sleep, still going about doing good, without heralds, unushered, unknown, unknowable, true inspirer of hope, of courage, of faith. Only another feature of the unknown quantity.

The nature of inflammation, like the nature of fever, we shall solve, if ever, at one and the same time. There is something prior to the *flamma*, something that antedates the *fever*. Both conditions begin with a sense of cold or chill, both are followed by the sense of increased heat. This, if far enough to trace the symptoms to show us that neither *flamma* nor fever indicate anything as to the nature or cause of the symptoms observed or experienced, we must admit that the secondary factors in either case are disturbances of both the nervous and sanguineous systems, and in the nature of cause and effect. That the train of symptoms originates in either case in some offence to the nervous system I think is palpably manifest. Of course, the nervous system depends upon a constant supply of healthy blood, and the heart and arteries depend also upon constant nervous supply of energy. These functions are mutually dependent one upon the other, and each sympathizes with the other. In inanimate Nature we are not ignorant of the violent disturbance that occurs to molecular attraction by sudden change of temperature from heat to cold, as instanced in the congealing of water, the fracture of glass and metals, the tempering of steel and iron. In both *flamma* and fever the treatment relates almost entirely to the prevention or controlling of the effects likely to be produced by an excessive action of the sanguineous system. The fatal results in either case are of the same nature and character. The primary symptoms and causes are of nearly allied character. Though we do not speak of specific causes for the term idiopathic inflammation, or of many fevers, yet why not? Have we not seen cases enough of inflammation from a heated condition to cold to make it quite certain that such sudden change is as certain to produce febrile or inflammatory action as is hot water or hot iron, or as contact with smallpox, measles, scabies or scarlatina, is to produce those disorders? Why then is cold air not specific in its action? The shock to the nervous system produced by fright, though only temporary, is responded to in an instant by the heart's increased action. Though this quickly subsides, the damage to the nervous system may prove lasting. What *we do not observe* in the frog, dog and rabbit, as the emotions in man of love, anger, fear, hatred, jealousy, mere shadows of reality, mere conjurings of the mind, as unreal as dreams, yet, unsubjected to sober reason, and the commonest common sense, may lay the foundation for many a lingering fever, many a desperate inflammation. Whether the poor bull-frog catches cold by getting his feet wet, or is exasperated by emotions as are men, I do not know. Are the effects of these inward disturbances the prompters of the final and fatal changes found upon post-mortem examinations? I think so, like the beginning of inflammation from traumatic and other recognized causes, first manifest by the exciting effects upon the nervous system and depressing effects upon the sanguineous system, culminating in chill or rigor. I would gladly sum up my conclusions by a theory upon which I think treatment should be based, and it would not be on the lines that you or I have been instructed, but that is not my undertaking in this brief paper. That would not be an answer to the problem you have given me. I have had in mind simply to trace the phenomena of inflammation, as herein limited, to its origin. The light of my compass points to the nervous system, and if I have the bearings, it still leaves the *how* and the *why* unexplained. The secret mystery of the nervous system I cannot fathom; possibly you can. How it receives or imbibes its displeasure is a mystery. How it manifests its resentment we may discover in making our autopsies.

I present you this brief paper on a great and important subject. That it is a perfect statement of the nature of inflammation I dare not affirm. As to the criticisms you may bestow upon it, neither myself or you are competent to decide as to their justness, fallibility or infallibility. The apparent and real truth is, that even at this late day, the theories and the practice for the alleviation or cure of this particular class of disordered actions is in a decidedly chaotic condition. A hundred theories have been advocated and entertained, and at last cast aside as worthless. As to treatment, one extravagance has followed another; some cases have recovered, and the others have died. Every one thinks he has cured some; none will admit that they have damaged some and killed others. I admit that I once had much firmer convictions as to a theory, and also as to treatment, than I have now. However, I am still unsatisfied and unconvinced that the most modern treatment is productive of better or equally salutary results as under a rule of practice which I followed with all its imperfections. You, gentlemen, are now in the race, and must run the gauntlet, taking the assaults from right and left, from front and rear, and I can only hope that, as you emerge from the ordeal, you may be awarded a crown of everlasting victory.

Dr. Baldy, in considering the subject of *urethral caruncle*, (*Philadelphia Polyclinic*) called attention to the fact that this condition is rare. The lesion most often mistaken for urethral caruncle is a true hemorrhoidal condition of the lower floor of the urethra. When these hemorrhoids become annoying and painful, it will usually be found that the trouble is due to an irritable bladder. For successful relief, the local symptoms must not be allowed to overshadow the more important bladder trouble. Dilatation of the urethrea is usually sufficient to effect a cure.

HEALTH RESORTS IN EUROPE AND NORTH AFRICA

By I. Gowing Middleton, M.D.,
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Intermediate Climates. (Continued).—

NAPLES, AMALFI, SORRENTO AND CAPRI.

SEE Naples and die! is an expression well-known to everybody who has read and who knows anything of European travel, and certainly Naples is one of the most unique cities in Europe, not only from its historical associations, yielding as it does interesting records of the ancient Greeks and Romans, which historical periods can be well studied in the Museum Nazionale, where is to be found all that is worth preserving from the excavations at Pompeii and Herculaneum. There is also to be found in the neighborhood the tomb of Virgil at Pozzuoli, and there also may be seen the remains of the amphitheatre of Seraphis. But it is not with the history of Naples that we have to deal, but with its present sanitary state, its climatical advantages and conditions, and its suitability for the residence of invalids.

Naples is situated on a bay, which is perhaps one of the most beautiful on the Mediterranean shores; it is commanded by three ports, and from the sea the view is most enchanting. Looking at the town, one sees that it forms two gently sloping amphitheatres, while standing back a little from the sea rises up Mount Vesuvius to the height of about 4,000 feet, and which during the night time is a magnificent spectacle when in eruption. That part of the city lying along the shore is not healthy or suitable for the residence of visitors, although a great deal has been done these last few years to improve the sanitary condition of Naples, and if the sanitary works are carried out as originally designed and intended by the authorities, Naples will be one of the healthiest cities in Europe, but up to now it has been one of the most unhealthy; also a new water supply has been brought into the town, replacing the horrible polluted sources of drinking water which had been in use, and which formed the only drinking supply for the inhabitants until recently. If this new water supply is looked after well, from a sanitary point of view, both as to drainage and supply, Naples, from being one of the most dangerous cities to visit, will be one of the most healthy and the most safe ; always with the reservation that the hills about Naples, especially in the direction of the Via Vittorio Emanuele, where are situated the Hotels Bristol, Tramantano and others, are by far the best, healthiest and safest for visitors. The cause of the unhealthiness of the parts of the town immediately adjacent to the sea coast arises from the unhealthiness of the soil, due to the vegetable deposits which for centuries have accumulated, giving rise to malarial germs and typhoid of a malarial type, which at one time was very common, and to a large extent still exists in this locality. With a general improved sanitary state it is better than it was, but to invalids, for whom we write specially, we recommend the higher lying ground, and the hotels which are placed a little way from this locality.

There are to be found in Naples several distinct climates. The same applies to the immediate neighborhood. The climate of Naples as a whole, is more humid than that of the French Riviera, less humid than that of Algiers, and the more you approach the hills and the neighborhood of Vesuvius the more tonic and bracing is the climate. The *Tramantano*, or north wind, in the springtime, is a cold wind, but except for great invalids it is not unhealthy. The effect of the Neapolitan climate is to produce a feeling of *bien être*, and a disinclination for everything serious, a languid, lazy, lounging about feeling, wishing to do nothing, think of nothing, or to be bothered. You see this also manifested in the faces of the natives, who spend their lives mostly in sleeping a couple of hours at mid-day, working a little in the afternoon, eating an ice, going to the theatre, getting up late in the morning, working a little until noon, and then repeating the same as the day before. It takes six Neapolitans to do as much work as an ordinary American workman in one day. The number of beggars in Naples is quite extraordinary; monstrosities of every kind show their amputated stumps, their distorted limbs, or their other deformities to the passer by. In fact, a Neapolitan will do anything but work. No doubt this is partly a racial character, but the soft, sedative climate has also much to do with it ; therefore, when invalids go to Naples, they feel the effects of this sedative sleepy, pleasing air at once. Naples is full of interest for everybody, well or ill. To those who cannot make excursions there are the shops without number, filled with all kinds of curiosities; there is the magnificent museum, the finest in the world, with all its treasures of antiquities from Pompeii and the ruins of surrounding cities of an ancient time; there are in the streets continual sources of interest in observing the diversified dresses of the peasants from the neighboring hills; the ever changing panorama of a Neapolitan street never loses its fascination for American visitors. So grotesque, so droll, so full of humor, and sometimes also sights so sad, that men and women who study life and character in the faces and .habits of mankind, cannot but find a rich field for observation in Naples and among its peoples. For those who can go excursions there are visits to Vesuvius, to Pompeii with its excavated streets, walking over pavement buried beneath the soil for 2,000 years, the evidence of a civilization dating back to centuries ago, and where can be read the sad story of the sudden deluge of showers of ashes which caught them amid their amusements and their occupations, and whose charred and fossilized bodies to-day can be seen by the modern Westerner. Then there are delightful visits to Capri, by the steamers which run regularly from Naples and back in the day. Capri, with its picturesque scenery and salubrious air, where you can find an appetizing lunch with delightful wine, Capri blanc ou bien Capri rosso, and in the sight of which is the Grotto Azzurra, which can be visited by boat in calm weather, and which produces upon the visitor a marvelous optical effect. It is an exceedingly common practice to take a boy in the boat and let him dive for small coins to the bottom of the water, which here is not very deep, and the optical effect by the light entering through the narrow aperture which gives access to the cave is such that the boy looks as blue as the water in which he plunges.

Then, again, there is Sorrento to see, with its splendid orange groves; the finest mandarin oranges in Europe are grown here; its factories of cedar and olive wood, where are manufactured a great number of articles, which are sold in the summer at the Swiss health resorts and on the Italian lakes. At Sorrento are to be found excellent hotels, but for visitors it is a little dull except in the spring. With the climatical value of Sorrento we shall deal later on.

Amalfi is another delightful excursion to make; it is situated on the steep side of a cliff at the mouth of a gorge, and although now it has only 7,000 inhabitants, and is reputed to be full of beggars and dirt, it was in the twelfth century a thriving republic with a population of over 50,000. Lately very much has been done to make Amalfi a winter residence for invalids; a new road has been made, the water supply has been improved, hotels have been built; but with all this it has not made as much progress as was expected.

Of course, the great excursion, which everybody goes from Naples, is to Vesuvius. There are several ways in which it can be done. The best plan is to go by carriage to the foot of the crater, and then up the incline by the Funicular Railway. Cheating is the order of the day in Naples. Twelve or fifteen francs are asked for what eventually they are delighted to get two francs for, and, in making the ascent of Vesuvius you will be asked to engage guides with ropes to pull up to the very little piece at the very top where the Funicular Railway stops. You will be bothered and importuned by every kind of ragamuffin to accept his help, etc., but the only plan is to refuse to have anything to do with them, to take a guide with you who is recommended to you, either by your hotel, or by some good office, as Gaze's or Cook's, and leave everything to them and merely follow their instructions.

Last year the Funicular Railway, which, we believe, is the property of Messrs. Cook & Sons, the tourists' agents, was destroyed, or nearly so, by the lava during the great activity of the volcano.

Arrived at the top, if there is much eruption going on, it is exceedingly important to look out that the masses of lava do not come down upon your head. A very common practice is to watch a piece of lava, and as it reaches the ground in a red hot molten state to put a ten centime piece in the middle with a walking stick, and wait until it cools, when it will be found embedded in the mass of black cinder. People commonly take home these pieces of lava as a souvenir of their visit to the crater of Vesuvius. Every one will be impressed with the suffocating odor of what would appear to be vaporized sulphur, both from its smell and from the yellow incrustations which are about the opening, but it is not sulphur, and I remember Prof. Franklin, of London, some years ago remarking to me that it gave him the impression also of sulphur or sulphurous acid, but upon analysis it was found to be chlorine in association; or muriatic acid and perchloride of iron as an explanation of this suffocating vapor.

It is impossible to speak of all the charms, the many other excursions which can be made from Naples, with advantage and interest both to mind and body, for we are chiefly concerned in studying it as a climate. Naples is the Eldorado of hypochondriacs. There is much to interest the wearied and overworked mind without fatiguing it. The climate gives to the irritable, excitable, depressed nervous system and tired brain quiet tranquility and a sense of rest. The sleepless sleep, the nervous dyspeptic finds he can digest better than before he came. The wearied and worried business man forgets his worries and enjoys the *dolce far niente*. The bronchitic, if he keeps out of the north wind when it blows, finds that he can breathe better than in a dryer atmosphere. The man or woman "with nerves" find themselves less nervous, and all around them there is a dreamy radiance which calms and restores the body and contents the mind. The people to whom Naples is suited in a climatic sense are those restless, hypochondriacal, overwrought people. Parsons, governesses, literary men and musicians, all of a highly strung, easily upset nervous system, find a heaven here, a heaven of rest and peace. Mendelssohn passed some time here, and felt, as he says, lazy, disinclined to work, and a wish to do nothing.

On the other hand, it must not be supposed that this sedative effect is one which goes on to a point of depression, but the reverse. Depressed, overworked, dispirited, hypochondriacal people find themselves surrounded by a lazy, sleepy multitude, and the hurrying and scurrying of busy feet, which is the order of the day in New York and London, is unknown here; consequently men who have been working at a high pitch are always obliged to drop into the quiet, slow habit of life, to take life easy, and it is thus they obtain the moral, physical, mental and nervous repose which gives them new force, new life, restoring their energies and the normal balance of their mental powers, which explains the great benefit often obtained by invalids without medicine, by a residence here.

Naples is not a place for consumptives, although in the first stages, where the health is otherwise fairly good, residence in spring in the hills in the north part of the town is very often most successful.

Sorrento is a spring place, and for those who wish to avoid the heat of Naples in the latter spring months.

Capri is a delightful place also in spring, and many people go there, where they find the air more tonic and the life more agreeable in May.

Amalfi is more sheltered than Naples. Though many cases of chronic bronchitis and asthma do well here, it will, in my judgment, never become a first-rate health resort.

There is an excellent and experienced English physician in Naples (Dr. Gardiner), and there is also an English church. The service of steamers between Naples and the Eastern Mediterranean ports is all that can be desired, and the large steamers coming from India, Australia, etc., call here on their way to Gibraltar and England.

THE TREATMENT OF DELIRIUM TREMENS.

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ACUTE alcoholic intoxication, or delirium tremens, is one of the results of prolonged indulgence in beverages containing a large proportion of alcohol. A single "drunk," or several "drunks" with intervening periods of sobriety, during which no alcohol is taken, will not produce delirium tremens. These affect the system more or less seriously, but do not cause the mental aberration designated by the term delirium tremens.

Before one can have the distinction of presenting the symptoms of this disease, he must have acquired certain chronic morbid indications of alcoholic saturation; which are displayed by perverted functions of the nervous, circulatory, or digestive systems. It should be borne in mind that the active and acute symptoms have a chronic condition as a base.

Two forms of delirium tremens are generally recognized; a primary disease and the so-called associated delirium.

In this paper we shall only treat of the former. Cases of the primary form may be divided into three classes: First, the maniacal variety, in which great physical activity, wild delirium and violence are the predominating symptoms; secondly, a melancholic form, in which the hallucinations and delirium are of a depressed character, and in which a strong tendency to suicide exists; and a third class, which presents a condition of profound exhaustion, and the delirium is of a low, muttering character. Each of these varieties display different grades, from exceeding mildness to great severity. Sleeplessness, tremor, mental perversion, and more or less revulsion to food are constant in all cases.

Basing the treatment upon a rational appreciation of these facts regarding etiology and symptomatology, the question arises, What are the best methods to pursue?

Alcohol is a poison capable of destroying life, and its presence and symptoms should receive the same kind of treatment as that given other toxic states; elimination of that which is in the system, and neutralization of the symptoms produced.

First, then, all alcoholic drinks should be absolutely stopped. The tapering-off plan prolongs the disease and interferes with speedy recovery. After having stopped the supply of poison we should get rid of that which is in the system. How can this be done? Physiologists tell us that alcohol is eliminated principally through the skin and kidneys; therefore activity of these parts will carry off the noxious material. With this idea in view the writer has for several years been in the habit of administering large quantities of hot water to these patients, giving from a half pint to a pint every half hour, until the desired end is attained. The result is to increase the flow of urine, and to produce profuse warm perspiration. The hot water likewises relieves the fearful thirst, which so often torments the patient; it quiets the stomach and improves the general condition. As a rule, after a few hours of such internal irrigation a craving for food is created, or a willingness to take food is displayed. Food is borne well if the stomach has been thoroughly washed of its accumulated filth. The diet should be hot milk, raw eggs and broths of various kinds, all of which are readily administered and assimilated. Another article of diet which is useful in these cases, if it is properly prepared, is beef tea. This should either be the cold, unboiled kind, or else the ordinary home-made beef tea, to which the white of an egg is added to each cupful. Nourishment should be given often, at least every three hours, and better every two hours. Several quarts of milk and from six to eight eggs can be safely taken in every twenty-four hours. In addition to milk being a prime form of nourishment, it is the grandest hypnotic known to medicine.

In a number of "tremens" cases there is presented, in addition to the symptoms directly referable to the alcoholic intoxication, a depleted condition of the entire system, due to a long absence from proper nourishment, which occasionally is so profound as to cause impending death from heart failure.

Common sense tells us here is the place for a stimulant. The weak pulse, the lowered temperature, and the array of asthenic symptoms generally show us the patient is near the danger line. Strong black coffee is readily obtained, and is usually all that is needed. If quick response does not follow its administration, sulphate or nitrate of strychnia should be used.

Sleeplessness is a frequent and distressing symptom, but its importance is not so great as many regard it. It is only a symptom of the disease, and not the disease itself. Overcoming it with large doses of hypnotics does not relieve the other symptoms of alcoholic intoxication. Many of the foremost authorities of the school of medicine most given to the use of hypnotics have warned their followers against such drugs in the treatment of this disease, especially during its early stages. Dr. Gowers states: "If hypnotics are boldly pushed they at last may act and the patient may die from their influence." The same author quotes Dr. Austie as believing "that when opiates fail to influence the brain and induce sleep they sometimes paralyze the heart.". Hypnotics are therefore not held in as high regard now as formerly. They often fail to produce the desired sleep, and frequently they increase the difficulties under which the patient is laboring, by inducing cerebral congestion or dangerous heart weakness.

Sometimes these risks must be encountered. For instance, when the patient has to be treated in a private house, or a general hospital, where there are other persons to be considered. Under such circumstances, if the patient is noisy, hypnotics cannot be avoided, but their use should never be excused upon the ground of proper treatment. One of the most popular sedatives and hypnotics at present is the hydrobromate of hyoscine. Very considerable danger attends the indiscriminate use of this alkaloid. It should never be used in asthenic conditions, or where valvular heart diseases exist. It is not certain in its action, and occasionally increases the excitement. Unfortunately many physicians prescribe chloral, bromide of potash, bromidia and other drugs of this type. It is bad practice and should not be followed, except when the patient's noise is to be treated, and his personal welfare disregarded for the comfort of those within hearing.

Trianol is a new hypnotic much in favor at present. It is perhaps the safest of its class, but its use should only be countenanced when an extinguisher of noise is desired.

We have referred to only the most commonly used hypnotics. The list might be made very much longer, but objections could be cited against them all. Such drugs are more or less dangerous, uncertain in their action, and of but little assistance when they act as desired.

My friend, Dr. Matchan, while police surgeon of Minneapolis, found that in the early stages of delirium tremens, when the patient was restless, nervous, apprehensive, and had the "horrors" on closing his eyes, with considerable irritability of the stomach, capsicum, in drachm doses of the tincture, had a most excellent effect. It gratified the palate for something hot, relieved the distressing symptoms, and stopped the progress of the impending disease.

Concerning the remedies which may be indicated in this disease, while there is a wide range of drugs having symptoms resembling those of delirium tremens, the really useful ones are limited, and their indications are fairly well defined.

Arranged alphabetically we have the following: Actea racemosa is very useful in mentally depressed cases, when the tremor is the most prominent symptom. The delirium is of a mild type, and the hallucinations relate to small objects or animals. There is also persistent sleeplessness, as well as great physical restlessness.

Arsenicum alba is occasionally indicated in asthenic cases, when the patient is bathed in sweat and profound exhaustion is present; the lips and tongue are dry, and the patient wishes them moistened frequently. The stomach is irritable, food being rejected as soon as swallowed. The hallucinations are visual, and refer to small animals, but to which the patient is indifferent. Great restlessness exists, and suicidal tendency is often present.

Belladonna is particularly useful in cases in which there is great mental and physical activity, with a disposition to be violent toward those opposing him. He seems to cherish delusions of persecution, as he is liable to assault a bystander, by biting or striking him. These spells of violence often come suddenly, like a clap of thunder out of a clear sky, and subside as quickly. There is sleeplessness, but with drowsiness which seems to be the forerunner of sleep, if it were not for the outbursts of violence.

The face is very much flushed, and the pupils are dilated and irresponsive to light.

Cannabis indica, in the writer's judgment, is the most frequently indicated and the most thoroughly reliable drug we have in our hands. When this drug is useful there may, or may not, be present great violence. While there is considerable talkativeness there is not the same degree of loquacity as found under some other drugs. The mind is so active that a number of subjects are introduced in a short space of time. Delusions and hallucinations are usually present, and they assume the characteristic form of this drug; they relate to large objects or to extended distances, or exaggerated spaces of time. They see large animals, or believe they are surrounded by numerous enemies, or imagine the room is of vast size, or that they have been ill months. The face is generally flushed, the pupils are dilated, they perspire profusely, and the principal emotion impressed on the countenance is surprise, although the expression may change frequently, as the different emotions come into play.

The pulse may be slow.

Hyoscyamus is another most excellent and useful remedy. It is especially indicated when persistent insomnia exists. The hallucinations are terrifying, and the patient makes frequent efforts to escape from his tormentors. There is a jactitation of muscles, rather than tremulousness. Quite frequently the patient keeps his arms waving, or his hands in motion. Loquacity is an almost constant symptom, the conversation being punctuated with profane or obscene language. There are also outbursts of careless laughter, sometimes alternating with loud weeping.

The above list may be almost indefinitely extended, but the few remedies named are those the writer has found especially useful and most frequently called for.

It is not presumed to embrace all the medicines which may be indicated, but simply those which will cover the largest number of cases.

Nux vomica, opium, stramonium, ranunculus, cantharis, and a host of others have likewise each its place, and may under certain circumstances prove as useful as any we have mentioned.

We have not attempted to present a list of remedies with their respective symptoms, culled from a work on materia medica, but to call attention to those remedies, with the indications upon which we rely, found useful in an extended experience in the treatment of the disease.

We have also desired to direct attention to the importance of treating delirium tremens as any other case of poisoning should be treated; *i. e.*, first eliminating the poison, and then relieving the effects of it.

SIX CASES OF HEMORRHAGE.*

By George Frederick Laidlaw, M.D.,
New York.

Lecturer on Pathology in the New York Homœopathic Medical College; Adjunct-Professor of Pathology in the Metropolitan Post-Graduate School of Medicine, etc., etc., etc.

In bringing before you these six cases of hemorrhage I would emphasize the statement that, first and foremost, hemorrhage is a surgical condition and demands local measures. If, by any ingenuity, the principles of local hæmostasis can be applied, it is the duty of the physician to give these measures the first place in the treatment, and to regard even his most trusted remedies as uncertain and unreliable.

There are certain hemorrhages, however, notably those from the bronchi, kidneys and bowels, where the bleeding point is internal and beyond our reach. In these cases we are forced to rely upon drugs which are soluble in the blood, and which can be carried in this way to the bleeding point, there to act either chemically or dynamically, as the case may be. It is with these latter cases that I propose to deal.

Case I.—Some years ago I was called to attend a young woman, twenty-five years of age, suffering from menorrhagia that had continued for thirty-one days. The patient was very weak and anæmic, the pulse small and rapid, and the temperature normal. There was no history of abortion nor any record of hæmatophilia in the family. The case proved obstinate. Millefolium and oil of erigeron in material doses had no effect upon the hæmorrhage. The patient grew weaker, and the stomach rejected nearly all kinds of food. The patient received in turn belladonna, calcarea, ipecac, sulphur, trillium, sepia, phosphorus, nux, crocus, china and sabina, all with no effect. She persistently refused local examination and treatment, but, during this time, I insisted on a measure that used to be highly recommended by one of our best known Homœopathic surgeons—that is, the introduction into the vagina of a long crystal of alum; but the oozing of blood continued. Fearing the consequences of the prolonged astringent action of the alum on the vaginal mucous membrane, the crystal was removed in twenty-four hours. As the patient absolutely refused other local measures, the treatment with internal remedies was continued.

About this time I was reading Dr. Compton Burnett's "Monographs on Diseases of the Liver and Spleen," and became very much interested in the doctrine of organopathy as there set forth. In pursuance of this doctrine I had already tried chelidonium, and found it to be a reliable remedy in most acute liver disorders, while ceanothus and squilla had served me well as apparent spleen remedies—that is for enlargement and discomfort in the region of the spleen—so I accepted, with much confidence, the statement that thlaspi bursa pastoris was a remedy specifically adapted to primary disorders of the uterus. This was a welcome ray of light on the case of menorrhagia that was then engrossing my attention, and, at the next visit, finding the patient unimproved by the last remedy, I mixed ten drops of thlaspi tincture in water, and ordered a teaspoonful every hour. On the next day I was greeted with the welcome announcement that the bleeding had ceased. The next day and the next went by with no return of the flow. The patient slowly gained in strength, and, in four weeks' time from the cessation of the hemorrhage, she returned to work feeling well and strong. Since that time, now four years, there has been no return of the hemorrhage.

Some time after treating this case I noticed that thlaspi was coming into prominence in the Homœopathic journals as a remedy for hemorrhage in all parts of the body. In the case just related, therefore, it may be an open question whether thlaspi cured because it is a specific organopathic remedy for disorders of the uterus, or simply because it is a good hæmostatic. This question I will not pretend to decide. I may say, however, that I have used thlaspi in hemorrhage in all parts of the body, sometimes with great satisfaction, and sometimes with no result whatever. I have also treated many cases of non-malignant menorrhagia and metrorrhagia, and, so far as I can recollect, it has not failed in a single case. I have had no opportunity of trying its powers in the metrorrhagia that attends myoma or epithelioma of the uterus, and I would like to hear from some of our surgeons as to their experience with the drug in these conditions.

Case II.—In the second case, there was apparently a brilliant cure by thlaspi. The patient, a man of thirty-five years of age, in excellent general health, was accustomed to daily horseback rides. One afternoon, after a specially long trip, he felt a bruised sore pain in the left kidney region, and noticed that his urine was quite bloody. The patient was growing very weak, presumably from the loss of blood. The urine deposited one-sixth of its bulk of bloody sediment, and from the character and location of the pain, I diagnosed a hemorrhage from the pelvis of the left kidney, due to the jolting ride, prescribed thlaspi tincture in 30 drop doses, four times daily, and enjoined rest in bed until the hemorrhage should cease. The next morning, the patient declared himself much stronger, and, as the urine contained less blood, he insisted on going to business. On the second day, that is, thirty-six hours after the first dose of thlaspi, there was not a blood corpuscle to be found in the urine by microscopcial examination. The next day the patient resumed his horse-back exercise. From that time to the present, more than two years, he has had no return of the hæmaturia, nor any sign of calculus in the renal pelvis.

I have always suspected that this case was a coincidence and not a cure, for we know that hemorrhage from the renal pelvis or bladder sometimes ceases spontaneously, just as will a nose-bleed, or the bleeding of a cut finger. Still, the severity of the hemorrhage, and its prompt cessation under thlaspi, made it to me an interesting case.

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* Read before the New York County Homœopathic Medical Society, October, 1895.

Case III.—One reason for doubting the value of thlaspi in the preceding case is found in its utter failure in another case of hæmaturia due to a fibrous polyp in the bladder. The diagnosis is beyond question, for the polyp was finally removed by a supra-pubic cystotomy; but before this was done the patient, who was a lady fifty years of age, was under medical treatment for repeated attacks for bloody urine, associated with intense bladder pain and strangury. In the first few attacks tincture of secale, four times a day, checked the bleeding, but it soon returned in a violent form. Thirty-drop doses of thlaspi were continued for two days without the slightest effect on the hemorrhage. Ergot and hamamelis by the mouth were ineffectual. At last the patient was given gallic acid in 10-grain doses every two hours. In twelve hours the bleeding perceptibly decreased, and in thirty-six hours the urine was free from blood. The case was a surgical one, however, and the continued vesical tenesmus necessitated operative relief.

The gallic acid increased the vesical tenesmus, and had to be suspended on the third day, but in the week that intervened between the checking of the hemorrhage and the cystotomy, there was no return of the bleeding. The patient recovered splendidly from the operation, and is now perfectly well.

Speaking of gallic acid, I know of no more reliable remedy in hæmaturia, no matter what its origin, but the drug must be given in appreciable doses. It does not irritate the stomach, it is quickly absorbed into the blood, and as it is excreted rapidly by the kidneys, the urine becomes a solution of gallic acid that flows directly over the bleeding point. It is not a remedy Homœopathic to hemorrhage, but a local styptic, and, to my mind, its use in this' way is not simply warranted, but is actually imperative upon the conscientious physician.

Now, lest any of you are beginning to think that the medical control of hemorrhage is a simple matter, I will refer to two fatal cases that have come under my observation.

Case IV.—In one the origin of the hemorrhage was obscure. The patient, an old gentleman, arose one morning and vomited a quantity of bloody fluid. Shortly afterwards he passed blood from the bowels. Ice was kept continuously on the abdomen and along the spine, and small pieces of ice were swallowed. Ten-drop doses of secale and 10-drop doses of thlaspi were given by the mouth. The hemorrhage seemed to be controlled for a time, but after some hours the bloody vomiting and purging came on afresh; the patient grew weaker and succumbed.

Case V.—The other fatal case referred to was one of true purpura hemorrhagica. The patient was a man aged thirty-five years. At first he complained of intense aching pains in the back and limbs, and had a slight cough, just as if he were in the early stage of the grip. At the end of the second day small purple spots appeared on the limbs, and the pains were somewhat relieved. On the third day he had a nose-bleed. Then the gums began bleeding, and he expectorated blood-stained mucus. The purple spots were appearing in great numbers over the abdomen, chest and limbs. Thlaspi tincture was given in 30-drop doses, together with arnica and hamamelis, but the remedies were useless. The patient soon began to pass bloody urine, to vomit blood, and to pass blood from the bowels. Blood came from the nose, the ears, even from the eyes. The purple spots on the skin increased until there was not an area as large as a quarter of a dollar which was not greenish-blue or purple, and the patient literally turned black. He became comotose, and died thirty-two hours after the first appearance of the purple spots.

In these two cases, in my opinion, the only effective treatment would have been by hypodermic injection, perferably of ergot. It is possible that if thlaspi could be given hypodermically it would act well in such a case as this. I would hesitate to inject the ordinary tincture. It might be too irritating, or it might cause coagulation. Perhaps some enterprising pharmacist will prepare an extract of thlaspi for hypodermic use. It is a promising drug, and well worth the experiment.

Case VI.—The last case that I will present to you occurred one year ago, and embodies my present ideas in the treatment of alarming hemorrhage. It was a case of hæmoptysis in a man forty-five years of age. It was a first attack in an otherwise healthy man, and was apparently brought on by a severe spasmodic cough that had lasted several weeks. Still, a younger brother of the patient had died of consumption, another had died of pneumonia, and an older brother, still living, had had frequent hemorrhages.

To show you the severity of the hemorrhage I will mention the treatment pursued from the very commencement of the case. The patient's brother instituted, at once, a rigorous course of hæmostasis. He made the patient lie down upon the nearest couch, kept him perfectly quiet, forbidding all talking, put an ice-bag along the upper spine and another broad, flat ice-bag upon the chest; put pieces of ice in the patient's mouth, administered 5 drops of the tincture of secale and 1 drop of the tincture of arnica every half hour, and sent for the doctor.

On my arrival, this treatment had been under way for four hours, but with no apparent effect upon the hemorrhage. The patient was lying upon a couch, himself and his surroundings all spattered with red drops. The pulse was rapid, the breathing was labored, and with every breath one could hear in the air passages an ominous rattle or gurgle, the nature of which was demonstrated, at frequent intervals, by a short cough and the expectoration of several mouthfuls of clotted or fluid blood. The point of the hemorrhage was probably in the right bronchus.

I gave 10 drops of thlaspi and a 10-grain powder of gallic acid. In half an hour, the thlaspi was repeated, but unfortunately the patient had swallowed considerable blood, which nauseated him, and free vomiting ensued. With past experiences in hemorrhage vivid in my memory, I saw that this was not a case in which one could depend upon the absorption of drugs by the stomach, so I resorted without delay to the hypodermic injection of ergot, in the form of Sharp & Dohme's Ergotole, which is 2½ times as strong as the officinal fluid extract. The first dose was 10 drops. In half an hour, as there was no diminution in the hemorrhage, he had another injection of 20 more. In half an hour more I could perceive a distinct diminution in the hemorrhage. In three hours the injection of 20 drops was repeated, and, thenceforth, every four hours, night and day, he had an injection of 20 drops of ergotole. I found that the effects of the injection lasted little more than four hours, and that if 4½ hours went by with no injection, the hemorrhage would break forth afresh.

On the fifth day there was only an occasional blood streak in the sputum, and the interval between the injections was increased to six hours. The tincture of thlaspi was then added in 10-drop doses four times a day. On the tenth day the injections were stopped, but, as a matter of precaution, the thlaspi and 10-drop doses of ergotole by the mouth were continued until the end of the second week.

I was amazed at the terrific dosing with ergotole that the patient had endured without showing toxic symptoms. I should say that on the seventh day of the treatment he was taken with an intense epigastric pain, with vomiting and high fever. As this apparent gastritis subsided while the ergot was still being used, I do not think it was an effect of the drug.

This patient was intensely anæmic and made a slow recovery, but has now regained his lost weight, and is in evident health. He has never manifested any signs of phthisis.

To sum up my experience with the medical treatment of hemorrhage I may say that, in severe hæmaturia, my first choice would be gallic acid, 10 grains every two hours. In moderate hæmaturia, thlaspi, in 10 to 30-drop-doses, may be tried.

In menorrhagia or metrorrhagia use thlaspi in the same dosage

In hæmoptasis of slight grade, thlaspi, arnica, hamamelis, lycopin, etc., are all sufficient, but, if the hemorrhage is profuse, and especially if there is vomiting, some form of ergot should be given hypodermically.

In profuse hemorrhage of any kind that threatens life, it is insufficient to depend upon the absorption of material doses by the stomach.

Herein, I think, lies the value of the highly potentized remedies. I have repeatedly seen their effects produced by dissolving the pellets on the tongue. Vomiting does not seem to prevent their action. But if you are using material doses they must be handled in a material way, and in an urgent case, the only method of insuring their entrance into the circulation is by hypodermic injection. Of the drugs suited to hypodermic use ergot is the best.

HYSTERO-MYOMECTOMY.*

By August Schachner, M. D., Louisville, Ky.

THE specimen which I exhibit for your examination is the result of an hystero-myomectomy. The patient was a negro woman aged thirty-eight years, whom I first saw two months ago and diagnosed a myoma of the uterus and advised an operation. Shortly before the operation symptoms referable to the bladder were pronounced, and in addition to this the woman had a marked mitral reguritant murmur; she was also a very asthmatic subject. Almost every day she would have an attack of asthma. I prepared her as carefully as I could for the operation, and made known the possible dangers of trouble that might arise during the process of anæsthesia, etc., to her husband. Both consented to the operation, which was performed thirteen days ago. Ether was used as the anæsthetic and no trouble was encountered. The highest pulse rate since the operation has been 114; highest temperature 100 F.

I adopted the abdominal method for obvious reasons, the principal of which is that I believed it would occupy less time than the other; the tumor, together with the uterus, tubes and ovaries, were drawn out of the incision, a neude was thrown around the mass, and it was cut off. In view of her condition, I believed, in this case, it was best not to enucleate the neck of the uterus. This was thought to be the safest method, since the principal danger was from the anæsthetic. There were some adhesions to the posterior part of the tumor, which was easily separated. The neude is now about ready to come away, thirteen days after the operation, and I think we can safely say that the woman is going to make an uninterrupted recovery.

I report this case simply from the fact the patient was the subject of pronounced heart trouble, yet she took ether as well as any one, and there was no evidence of heart failure during the operation. No trouble followed the administration of the anæsthetic, such as we might expect from a patient suffering with organic heart disease.

I might mention that the bladder in this case was situated considerably above the pubes; just why it was so located, did not appear clear.

REMARKS.

Dr. J. W. Irwin: Upon several occasions I have administered ether and chloroform to patients who had valvular affections of the heart, without causing any bad effect. I never hesitate to give chloroform in any condition of the heart, and have never yet seen any bad results following its administration in such cases.

Dr W. H. Wathen: Dr. Schachner was correct in using the extra-peritoneal method in this case, because of its rapidity and the probable danger of continued anæsthesia. Otherwise I am in favor of either the intra-abdominal, but extra peritoneal method, or total extirpation, because recovery is much more rapid, and our patient is left in a better condition. Some time ago I studied this question closely as regards the mortality of these operations, the extra-peritoneal, the intra-abdominal but extra-peritoneal, and the total extirpation. By taking such men as Bantock with the extra-peritoneal, Baer and a few others with the intra-abdominal but extra-peritoneal, Martin and others with the total extirpation, I found the mortality to be about the same. No universal method can be adopted for treating the pedicle, and each operator must adopt that method which is best suited to a given case. Again, one operator is more proficient in one method than another, because of greater experience with it, so he would be justified in employing a method that would not be adopted by another operator.

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* Reported to the Louisville Clinical Society. Stenographically reported for this journal.

In the case reported I think the operation was more easily performed by the abdominal route than through the vagina, because of the large pedunculated tumor which has been shown us, but had there not been a pedunculated growth of considerable size the operation could have been done more easily through the vagina, and more satisfactorily, and with less danger.

COPAIBA AND OIL OF SANDALWOOD IN CYSTITIS.

By E. M. Hale, M. D., Chicago.

In my article on cystitis which appeared in a late number of the Medical Times, I mentioned that I had always succeeded in curing catarrh of the bladder by the use of internal medicines.

I lately treated an obstinate case in which I feared that my assertion was an "empty boast," but the result cleared me of that charge.

The patient was a woman of fifty, whom I had twice treated for the same affection. The first attack occurred ten years ago, when I cured her with copaiba. That attack lasted about two weeks; the second attack was about five years ago, and lasted three weeks. Copaiba, turpentine and cubebs were used without benefit for two weeks. Then chimaphila cured in a week.

The last attack lasted four weeks. Chimaphila was used the first two weeks, but failed to cure. Then pichi was given for a week with no benefit; uva ursi for four days, when the mucus and purulent discharge became so abundant that I prescribed the following:

℞ Balsam copaiba	ʒ ss.
Oil sandalwood	℥ ss.
Oil cinnamon	℥ i.
Emulsion acacia	℥ iiiss.
Simple elixir	ʒ iii.

Sig. A desertspoonful every four hours.

This cured the disease in four days.

I was somewhat surprised at the rapid subsidence of the catarrh, and almost expected there would be a recurrence. The mixture was continued in the teaspoonful doses for a week, when, no mucus appearing in the urine, it was suspended. It has now been a month since the mucus disappeared, and not a drop of it has appeared. I do not know which drug is entitled to the credit. It would have been more scientific to have given one drug at a time, but, as the patient was cured promptly of a very painful disorder, it does not much matter.

CORRESPONDENCE.

AUTHOR, EDITOR AND CRITIC: THE HOMŒOPATHIC TEXT BOOK OF SURGERY.

To the Editors of the New York Medical Times:

Taking it that it is the policy of your journal to be fair and courteous to all publications reviewed in your pages, and their authors and editors, I ask the privilege of making rejoinder to the reviews of the "Homœopathic Text Book of Surgery" by yourselves and "M. O. T.," appearing in your issue for April.

On page 119 you criticise the mechanical construction of the book. It is probable that you have seen one of the volumes sent out from the bindery before we saw the necessity of passing upon each book as issued. You surely cannot rightly complain of the paper, the typography, the press-work, the color plates nor the present binding, for in all these the new book has been pronounced by competent critics the full equal of any single volume work on its subject. The color work is especially excellent. It was chiefly done by the Riverside Press, Cambridge, a house justly celebrated for superior workmanship. Even a casual glance must convince an unprejudiced observer that in this particular the book is superior to its single-volume rivals, and even to Dennis' excellent four-volume "System of Surgery," while in the matter of typography, paper and press-work it excels many of the best, and equals all except Dennis'. It is true that some of the zinc cuts and half-tone plates do not come up well, but those below par are possessed of no special value, after all, and whatever of disappointment may arise in this relation is more than compensated for by the excellence of the color work adorning the sections supplied by Helmuth, Lee, Laidlaw, Shears, Walton, Van Lennep, Macdonald and the writer.

As evidence that the Times was not very careful in its examination, it is sufficient to call attention to the fact that it has credited the section on bacteriology and pathology, which it commends, to Laidlaw, whereas it was contributed by Chislett, of Chicago; and in suggesting that the various articles are little more than a reproduction and rearrangement of ideas gathered from numerous works on surgery recently issued, it has practically held up against twenty-five surgeon-authors, resident all the way from New York and Boston to San Francisco, that they are plagiarists or not sufficiently well informed in their specialty to commit their ideas to paper in their own language. Of course, the essential facts of surgery are to be found in all surgeries. But this book is pre-eminently the work of our own men, clothed in their own language, reflecting their own views and work, and illustrated largely by illustrations original with them and their colleagues. To suggest otherwise is to do violence to truth and to do injustice, whether intended or not, to as good and true men as adorn any profession.

With reference to the criticisms of M. O. T., I desire to say they are those of a rejected contributor. When this work was announced, M. O. T. communicated with me under date of August 20, 1894, offering for use the following articles from his pen:

"1. The value of bromine as an antiseptic in surgery, in poisoned wounds of all kinds, and for fumigation.

"2. Hot water and the rubber bandage for sprains.

"3. Chloride of ammonia in hypertrophy of the prostate and in prostatitis.

"4. The treatment of carbuncles by circumscribing with collodion and injecting with a solution of carbolic acid and glycerine.

"5. The treatment of ingrowing toe nail without the knife.

"6. The medical and oil treatment of appendicitis.

"7. The cautery in spinal irritation.

"8. Fluid cosmoline for acute inflammation of the middle ear.

"9. Guiac in chronic ovaritis."

In offering these for insertion in the new volume he assured me: "I shall bear you no ill if you do not care for one or all, for it is my intention to give them to the profession in a condensed form for ready reference in a small book. I would not allow any of the articles to go in your book *without being given credit for every one.*"

Here it will be seen that M. O. T. considered the senior editor of the new surgery—there are two editors—competent to pass upon his preferred contributions, while he now bemoans that a more capable surgeon did not serve as editor. This may be consistent, it may be honest—it looks neither. At that time he expressed satisfaction that I had taken up the work of building such a book, and informed me that two years before he had attempted the construction of a work along the same lines, but had failed to interest the publishers applied to, the ones the TIMES refers to as better book-builders than the builders of this one. It is but natural to believe that this fact, coupled with the other fact that the matter submitted by M. O. T. was not used, had much to do with prompting him to go out of his way to attack the work of more than a score of surgeon-authors, nearly every one of whom are recognized in their respective localities as masters of their art.

In attempting to get up a book upon the plan of the one he condemns, M. O. T. would lead us to infer that he considers himself competent as a surgical editor. Has he had more experience in editorial work, in book construction, or as a surgeon, than the editors of this volume? Hardly! It may be well for me to let it be known that the effort was made to get our best known surgeon, Helmuth, to pass upon all the manuscripts of the volume under discussion before they went to press, but without avail. The very magnitude of the work made the task an uninviting one. Nor was it necessary. For I consider myself exceedingly fortunate in having secured the coöperation and editorial assistance of so competent and classical a surgeon-editor as my associate, Dr. T. L. Macdonald, to whom whatever of credit for the surgical editing of the volume is deserving justly belongs. Even M. O. T. could have done no better.

An analysis of our critic's criticisms shows that besides complaining about the supposed unfitness of an editor to whom he submitted his manuscripts for acceptance or rejection, his chief complaints relate to the consideration of carbuncles, sprains, prostatitis and appendicitis, subjects all covered—in his way—by the papers offered me. I have the right to infer, therefore, that disappointment and chagrin at their omission, which was probably not known to the TIMES when his review was accepted, prompts, in good part, at least, his criticisms, and with the facts before the readers of the TIMES I have no fear that his conclusions in relation to the book will weigh very heavily with them.

But M. O. T. is careless, also. He says he fails to find reference to the Northrop method of anæsthesia. I beg to refer him to the closing paragraph on this subject by Macdonald, on page 117, and also to the reference to the Northrop method on page 1117, by Pratt. The authors referred to have given all the credit to this subject that it seems to deserve, especially when it is remembered that the combination of oxygen and chloroform is not in general use, not even in the college and hospital with which its author is connected.

In conclusion, I have clearly shown that the review of the TIMES is not a carefully written one—I am quite willing to admit, judging from its nature, that it may have received one of the imperfect copies which were sent out direct from the bindery before we were aware that imperfect copies were being issued—I have shown that M. O. T.'s review is not the review of an unprejudiced critic. I have also shown that he has placed himself in a very peculiar position before the profession by now criticising as questionably competent the editor to whom he submitted his own manuscripts for acceptance or rejection. All the authors and editors of this work ask or expect from the journals and profession is justice. The book must stand or fall upon its merits. But we feel that we have a right to enter protest against carelessly written reviews which do not review, and to enter protest against caustic and adverse criticism by one holding the relation to this volume that is held by M. O. Terry. It should not be a case wherein

> "A falcon, tow'ring in her pride of place,
> Was by a mousing owl hawked at and killed."

Very respectfully, C. E. FISHER.

Chicago.

DR. TERRY'S REJOINDER.

To the Editors of the NEW YORK MEDICAL TIMES:

Sirs: In replying to the distinguished publisher and editor of the "Homœopathic Text Book of Surgery, I think it unnecessary to disclaim feeling in the least chagrined on account of the fact that he failed to appreciate articles, the substance of which, to a large extent, has been adopted by surgeons throughout the country. I am under obligations, however, to the doctor, for saving me the disgrace of being connected with a book so glaringly defective, and so dangerous to follow in minor and important details. I feel now as when I sent the articles to him: "I shall bear you no ill if you do not care for one or all:" The inference which the doctor draws, of my placing confidence in his judgment to pass wisely on my articles, is simply school boy logic. The reason why I gave up the plan of urging the construction of a work on surgery by surgeons of the Homœopathic school, the same to be under a skilled editor-in-chief, such as Dr. Helmuth, was that the publishers in Philadelphia insisted on introducing articles involving potencies. The plan of the work was approved by a large number of our surgeons, such as Helmuth, Lee, Biggar, Schneider, and Pratt.

I had supposed one could calmly discuss the defective features of a work of this sort without having it construed into a personal attack. I bear no ill will toward the doctor for what he has said, or shall not for what he may say of me in the future, if he wishes to be personal. I have been criticising a book, not a man. So soon as a man steps down from the plane of reasoning into the mire of vituperation I am through with him *personally*, but not with a production which affects the good name of the profession.

I have not given this book a thorough going over. It would be necessary to write a book in order to do so. If some of the distinguished surgeons, contributors to this volume, will come out in print as they have to me personally, perhaps the editor-in-chief will drop the idea of having received a vindicative criticism of his work.

Very respectfully, M. O. TERRY.

Utica, April 18, 1896.

MONTREAL LETTER.

To the Editors of the NEW YORK MEDICAL TIMES:

Permit me to express personal admiration for your manly editorial under the heading "Calomel," in your January number. The TIMES has been accused of "straddling the fence" so often and so persistently that it is a real pleasure to be able to point to this article as a refutation of the insinuation.

As I understand it, the policy of the TIMES, or rather its creed, is a thorough going belief in the law of similars, with the reservation that, as the knowledge of symptoms, and the study of the secondary effect of drugs is by no means complete, a true physician with a conviction that his mission is the relief of human suffering, is free to use physiological medicine in those cases where curative results cannot be obtained from the secondary working of drugs as now known. I may be an exception, but nevertheless I can truly say that leaving out cases classed as mechanical or chemical, those conditions which cannot be successfully treated by the drugs as now known in their secondary action, are very, very few. I personally hold the belief that, in any curable case in which I have failed, the reason is to be attributed to either my lack of knowledge of the materia medica or to my lack of capacity to read aright the symptoms, pathological and symptomatic. I strongly deprecate a present judgment of the law of similars, believing that centuries will elapse ere it becomes a perfect system, capable of standing all criticism. But I believe that the profession should be urged to believe and act on the belief that the development of Simila did not cease with Hahnemann, and that the more thoroughly the field is developed, the less will medicine need the primary effect of drugs. It is a discouraging fact, but practically the real development of our materia medica ceased with the death of Hahnemann. Homœopathy differs from the dominant school in that its development demands human sacrifice instead of that of the lower animals. The age of heroic self-martyrdom seems to have passed.

While I fully realize the sincerity of the TIMES in its abhorrence of the sectarian name of Homœopathy, I have no alternative but to assume it, for 999 per cent. of my prescriptions are pure Hahnemanian Homœopathy. And on this basis I have built up and held a large practice, without advertising. I should, in my idea, be as justified in leaving out the prefix Homœopathic, as a notary would who, because he served as a church warden once a month, called his profession that of a church warden. My physiological medicine bears about this relation to my Homœopathic medicine.

On one point especially do I disagree with the respected editors of the TIMES, and that is that the recognition by the dominant school of the law of similars will be hastened by the dropping of the name Homœopathy. If Luther had dropped the apparently inadequate name Protestantism, would this faith have been the power in the world for good it is to-day? If Hahnemann had not assumed a distinctive and sectarian name for the doctrine of Similia, would it have had the regulating effect on the dominant school it has to-day?

Man is a bigoted animal, a cowardly animal, and force has always been a greater power in the world than gentleness. The greater the temporal power the closely welded Homœopathic school obtains, the speedier will be the recognition of its guiding principle by the despotic and arbitrary dominant school of medicine. I recently begged a bright young practitioner, a graduate of my own University of McGill, to at least make a careful study of the secondary effects of drugs, so that he could at least say that he was rejecting a theory as useless which he had carefully investigated. His reply was the stereotyped one: "I do not *want* to know anything about it, and am quite satisfied with my present system." Yet the TIMES would wish us to drop the name, Homœopathic, in deference to this kind of obstinate, mulish bigotry. I say the way to get them to study Simila is to hammer into them the name Homœopathic until they are overwhelmed by the material success of the inferior people called Homœopaths. HUGH MATHEWSON PATTON.

Montreal, January 6, 1895.

DR. CARLETON AND HIS STATE SOCIETY.

The following correspondence has been sent us by Dr. E. Carleton, with the request that we publish the same.

FEBRUARY 26, 1896.

DEAR DOCTOR:

Referring to pp. 216-7, "Transactions of the State Society, 1895," I observe that there is no mention of me or of my remarks, in the discussion of antitoxine; while all the rest who participated are named, with synopsis of their remarks. If you are willing, please tell me why this is so.

Yours truly,
EDMUND CARLETON.

To John L. Moffat, M. D., Secretary Homœopathic Medical Society of the State of New York, 17 Schermerhorn street, Brooklyn, N. Y.

BROOKLYN, N. Y., March 2, 1896.

MY DEAR DOCTOR:

I am very sorry to have lost your remarks on antitoxine at our October meeting. It must have been that some one came up and diverted my attention for the moment. Since reporting our proceedings myself, I have been troubled quite a little by people interrupting me by questions, etc., and even the telling them to come up later, or go to some one else causes me, I know, to miss something. You may be interested to know that our Kings County society last year instituted a proving (three provers) of Behring's antitoxine. The results were very meagre—practically nothing, so far as corroboration among the provers went—the few symptoms that could be attributed to the drug are almost all *found in the pathogenesis of carbolic acid!* Yours, MOFFAT.

Dr. E. Carleton.

MARCH 13, 1896.

DEAR DOCTOR:

Your favor of March 2d received, in answer to mine of February 26th.

This is a remarkable case, which it might puzzle a professor of psychology to make clear, For my part, I am unable to see how every speaker before and after me should be reported, and no mention made of me or my remarks, while as a matter of fact every one in the room listened intently to every word of my short speech, which was parliamentary and to the point, and at the same time the Secretary was busy jotting down the words. Even more remarkable is the fact that the speaker who followed me should be very well reported, with one exception, namely, his opening sentence, which was this: "*Dr. Carleton is right.*"

My curiosity has been considerably aroused; and that must account in part for my intruding at this time, but a much weightier reason is that you seem so completely grief stricken over the accident. Do not let it weigh you down too heavily, Incidents have occurred before. I am very philosophical over this one. Yours truly,

EDMUND CARLETON.

To John L. Moffat, M.D., Secretary Homœopathic Medical Society of the State of New York, 17 Schermerhorn street, Brooklyn, N. Y.

PHYTOLACCA DECANDRA FOR EPITHELIOMA.

Goodman points out (*South Carolina Medical Journal* for April) that while the root and berries of the above-named plant have been largely experimented with, and have been found to possess therapeutic properties of great value, yet the green leaves of this plant possess a property which alone would entitle it to rank among the most valuable remedies of the materia medica. We refer to its power of destroying epithelioma. The method of using the remedy is to bruise the green leaves to a pulpy mass; collect the expressed juice in a shallow receptacle, as a plate; allow it to evaporate to a thick, pasty consistency; spread a portion of this on a piece of silk or other suitable cloth, and apply to the morbid growth.

The plaster should be removed and the part washed twice daily. The remedy causes severe pain. It has a selective action for the morbid tissue; follows out all the irregularities of the epithelioma; causes, as it were, its liquefaction and removal, and then acts as a cicatrizant for the open sore.

As soon as all the morbid tissue is destroyed, a bed of cicatrical tissue begins to spread from the periphery, and as this occurs the plaster should be cut smaller each day, so as to conform to the size and shape of the surface to be covered by it.

Unlike other remedies, it can be used fearlessly, does not endanger the patient, combines within itself a caustic action and healing property, and requires to be used in the same manner from beginning to end.—*Therapeutic Gazette.*

BIBLIOGRAPHICAL.

Coca and its Therapeutic Application. By Angelo Mariani. With illustrations. Third edition. New York: J. N, Jaros, 52 West Fifteenth street, 1896.

This little volume, dedicated to the medical profession, comprises all that is known of this wonderful drug. A copy may be obtained free by addressing as above and mentioning this journal.

Diets for Infants and Children in Health and in Disease. By Louis Starr, M. D., editor "American Text Book of the Diseases of Children." Philadelphia: W. B. Saunders, 1896; 12mo.; price, $1.25.

A most useful and convenient little volume of diet sheets for the baby, which can be torn out and modified to suit the individual case, with full directions.

Infantile Mortality During Child Birth and its Prevention. By A. Brothers, B. S., M. D. William Furniss Jenks' Prize Essay of the College of Physicians. Philadelphia: P. Blakiston & Co.

The author has aimed to present a careful bird's eye view of his subject, without the detailed account found in the text books, and to point out the advances made in recent years in the interest of the unborn child previous to labor, during the critical hours of actual labor, and in the earliest period of life succeeding labor. The author has brought to his task a large experience, excellent judgment and marked skill in presenting his facts and conclusions.

The International Medical Annual and Practitioners' Index: A work of reference for medical practitioners: 1896. Fourteenth year. New York: E. B. Treat. Price, $2.75; pp. 728; duodecimo.

The present volume maintains the reputation of this work for practical reference in progressive medicine.

The therapeutic review for the past year is written by Prof. Hare, and of course is a masterpiece and up to date.

Our readers can make no mistake in ordering the book.

The price charged is certainly merely nominal, and dependent upon its enormous circulation. The volume is copiously illustrated.

Diagnosis and Treatment of Diseases of the Rectum, Anus and Contiguous Textures. Designed for practioners and students. By S. G. Grant, M. D., Professor of Diseases of the Rectum and Anus, University and Women's Medical Colleges. With two chapters on cancer, by Herbert William Allingham, F. R. C. S., Eng. Illustrated with sixteen full-page chromo lithographic plates, and 115 wood cuts in the text. The F. A. Davis Publishing Co., New York and Philadelphia, 1896; $3.50.

The writer has the happy faculty of presenting his ideas in that choice English, and clear and concise language, to impress the facts at once and strongly upon the mind. The classification of subjects is such that any desired point can be reached at once. The illustrations are all new, most of them being photographs from cases of the author and of Dr. Allingham. Among the best chapters in the book, and much needed at the present time, are Railroading As An Etiological Factor in Rectal Diseases, and Auto-Intoxication and Auto-Infection From the Intestinal Canal. It is seldom a book upon any speciality reaches our table with so much to please and so little to question as in the book under notice.

A Repertory of Hering's Guiding Symptoms of Materia Medica. By Calvin B. Knerr, M. D. Philadelphia: F. A. Davis Co., for the Estate of Constantine Hering, 1896; pp., 1,200. Price, $10.

The touching tribute in the dedication of this great volume is what might be expected by those who were familiar with the relations which existed between the author and he who was "more than father, friend, adviser and teacher," to whom the work "is affectionately and reverently dedicated."

If it has ever been questioned whether Dr. Knerr was the proper one to continue the work Dr. Hering left unfinished, the doubt will be dispelled by a perusal of this herculean effort.

The order of arrangement is the anatomical, and is divided into forty-eight chapters.

The abbreviations, ciphers, signs, rubric words, marks of distinction which indicate the relative value of symptoms, and other minor points, all show with what care and patience the labor has been done.

The author most properly emphasizes the statement that "the prescriber has to deal with both objective and subjective facts, but should always bear in mind that *individualization is the life of therapeutics.*"

A chapter is appended on the important subject of drug relationship, and the volume closes with a useful index.

Those who use books of this class will find this, we are confident, superior to any extant.

The typographical part of the work, also accomplished by loving hands, is all that could be desired.

BELLEVUE HOSPITAL MEDICAL COLLEGE AND THE COMMISSIONERS OF CHARITIES.

President Croft, of the Board of Charities, says that the Commissioners intend to make an investigation, to ascertain if it is for the interest of the city to allow the corporation of the Bellevue Medical College to continue to have the use of the building owned by the city on the Bellevue Hospital grounds. The lastest contract which the corporation made with the Commissioners of Charities and Correction for the use of the building will expire in 1898. By its terms the corporation is not obliged to pay any rent for the building, and pays less than $4,000 a year for repairs. The medical college enjoys exceptional advantages on account of its nearness to Bellevue Hospital and the Morgue. Only two other medical colleges, the University Medical College and the College of Physicians and Surgeons, are allowed to share in the benefits of the institution.

The practice obtained by graduates of the three medical colleges who get places on the Bellevue Hospital staff is considered of great value to young physicians, and positions in other hospitals under the control of the Commissioners of Charities are regarded as almost equally desirable. The County Medical Society has tried to compel the Commissioners to fill vacancies in the medical and surgical divisions of the hospital after competitive examinations open to the graduates of all medical colleges, but Justice Andrews, of the Supreme Court, has denied an application for a mandamus to that end.

The Commissioners of Charities have not obtained much information as to the revenues of the Bellevue Medical College, but they expect to get such information by means of the investigation which they have decided to set on foot. It is known, however, that the revenues are large, on account of the fees of the medical students, and that, after the expenses are paid, the net profits are divided among the members of the faculty. Each member of the faculty, therefore, receives a personal dividend each year, and the dividends have been so large that some members of the faculty have bought lots in East Twenty-sixth street, as near the hospital as possible, as a new site for the Bellevue Medical College, in case the contract for the use of the building on the hospital grounds cannot be renewed.

This is an old story we know, but now we hope this institution will have justice meted out to it by the Commissioners.

Itching, which is so often found in connection with eczematous conditions of the anal and genital regions, can be greatly relieved, according to Dr. Cantrell (*Phila. Polyclinic*), by the use of an ichthyol wash, ranging in strength from 1 to 2 drachms to the ounce of water.

The New York Medical Times

A MONTHLY JOURNAL

OF

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EDITORS:

EGBERT GUERNSEY, M.D. ALFRED K. HILLS, M.D.

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NEW YORK, MAY, 1896.

REMOVAL.

The office of this Journal will be removed, May 1st, to 180 West Fifty-ninth street, Central Park South.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 19 Liberty St., N.Y.

TREATMENT OF PNEUMONIA IN CHILDREN'S HOSPITALS.

THE April issue of the *Archives of Pediatrics* contains articles from the physicians of hospitals in this city, Philadelphia and Boston, on the treatment of pneumonia in children. There is a great similarity of treatment in all these institutions. Patients are admitted to the St. Mary's Free Hospital for Children between two and fourteen years of age. The attending physician, Dr. George Montague Swift, in cases of broncho-pneumonia, puts the patient into a room at the temperature of about 75°. Upon a kettle of boiling water is placed a vessel of beechwood creosote or pine needle oil, taking care that the creosote does not boil down and become too pungent. The combination of warmth, steam and evaporating creosote makes a soft, agreeable atmosphere which he finds most soothing to the inflamed and irritated bronchial mucous membrane, and the cough speedily softens; expectorants are seldom needed. If an anodyne is needed on account of pain, restlessness or excessive cough, 1 to 2 grains of Tully's powder is given. Castor oil is given occasionally, when there is an abundant bronchial secretion. If the secretion is copious and watery, nitro-glycerine is used; alcoholic stimulants are given when needed, and this he finds to be the case very often, as the patients are weak generally from previous bad nourishment. Muriate of ammonia is given if an expectorant is needed. Externally, the chest is rubbed with camphorated oil or turpentine. During the acute stage the food is milk. In lobar pneumonia, which he believes to be a disease distinct from broncho-pneumonia and decidedly infectious, the effort is made to keep the children comfortable in well-lighted and well ventilated rooms, securing to them nourishment, great relief of pain and sleep.

Chloride of calcium is given (hepar. sulph.) in doses of 2 to 5 grains, every two or three hours, dissolved in a compound syrup of sarsaparilla. His theory is that this particular salt is quickly absorbed into the blood, increasing its alkalinity, and thereby putting the blood serum in better condition to overcome the toxin of the disease. Hepar is undoubtedly of great benefit in lobar pneumonia, but we give it in very much smaller doses than the author. The oil-silk jacket is not used, but counter irritatants of mustard and flax-seed for a few minutes until the parts become red, or the application of a flax-seed poultice. For relief of pain and excessive cough Tully's powder is given, and sometimes, to promote sleep, phenacetin or sulfonal. If the tongue is much coated and the bowels not freely open small doses of calomel are given. In this form of pneumonia the author thinks alcoholic stimulants are seldom required.

Dr. S. Emmett Holt, of the Babies and the Nursery and Childs' Hospital, prescribes in bronchial pneumonia as few drugs as possible, and no expectorants, using the stomach for food and stimulants, relying upon external means or applications to control special symptoms. These applications are similar to those used in St. Mary's. His treatment is pure air, careful feeding, judicious stimulation, with the regular use of counter irritation and inhalation, the frequency of these desponding upon the severity of the cough, the amount of bronchitis and the abundance of the secretion. Lobar pneumonia is managed much in the same manner, except stimulants are given later and in many cases not at all. Counter irritation is not used except in cases with much pleurisy, and inhalations are employed only for the relief of distressing cough.

Dr. Crozer Griffith, of the Children's Hospital, Philadelphia, thinks that fever *per se* may be disregarded in a great measure, as it is generally the nervous symptoms which require treatment. Should these, however, seem to depend on the existence of fever, he resorts to sponging with water from 70 to 80°. When the respiration becomes embarrassed, the heart failing and the strength waning, he finds plunging the patient into a bath of 103 to 105° will often rouse the failing powers in a remarkable degree. He does not use the cotton jacket. Counter irritation is used occasionally, but generally in the form of turpentine stupes. Coal tar antipyretics are used occasionally.

Dr. Buckingham, of the Children's Hospital, Boston, says medical treatment is purely symptomatic; many patients go through the disease without any medicine whatever.

Dr. Northrup, of the New York Foundling Hospital, says the treatment is mostly symptomatic. At the onset, the bowels are relieved by calomel. For pain, localized, intermittent, poulticing and opium in the form of Dover's powder or paragoric. High temperature, warm sponging with alcohol and water; ammonium carb. is given as a stimulant and expectorant, and nitro glycerine as a cardiac stimulant.

IN THE HEART OF THE ROCKY MOUNTAINS.

A SHOUT comes to us from a seeker of health and pleasure, who in her wanderings has visited almost every nation and climate in the world. It is the enthusiastic shout of the old Greek, "*Eureka, Eureka,*" but formulated in different language. She says: "Send all the lame, the halt, the exhausted sons and daughters of care and mental toil to this life giving air, this fountain of health among the most beautiful and magnificent scenery in the world.

"Three years ago the Raymonds invested in this hotel and the surrounding grounds a million of dollars. The largest spring of boiling saline sulphur water in the world is here. As the skill of the architect and the landscape gardener were taxed to the uttermost in the hostlery and the grounds, so too, the sanitary engineer was given full liberty, with an unlimited supply of funds, to utilize this boiling spring of mineral water to its fullest extent for pleasure and health. The result is something marvelous. The old Romans never dreamed of such a combination of luxury.

"In the bath-houses and Roman bath-rooms you can enjoy a bath in any form, from the vapor to the shower, and stepping out from your dressing-room you plunge into a sea of water at a temperature of 95°, covering an acre of ground. Here, on the coldest day in winter, as you take the plunge in the open air, the exhilarating effect is beyond description, and is worth a journey from the East to experience. And then, with every nerve tingling with pleasure and alive to enjoyment you go into a hotel, every line of which is an artistic study, and sit down to such a dainty table as I have never seen in America!" The picture drawn by our friend of the Colorado at Glenwood Springs, Col., was so graphic, so full of life and beauty, and so thoroughly appreciative, that we make no apology for reproducing it in the TIMES.

TANNALBIN.

THIS preparation has been used in the German hospitals in certain forms of intestinal catarrh with marked benefit. Dr. Von Enyd, from his hospital observations, concludes that tannin albuminate (tannalbin) heated for hours at a high temperature, is resistant to gastric digestion and is dissolved only in the intestines.

Even large doses employed for weeks do not give rise to alteration in the gastric functions. Within wide limits, tannalbin is a perfectly harmless remedy, possessing the great advantage of being absolutely devoid of taste.

In chronic intestinal catarrh of uncomplicated natures it is a reliable and certain remedy, producing the most satisfactory results. In diarrhœa of phthisical cases it is also of much value. In severe and extensive anatomical lesions of the intestinal mucous membrane it is, of course, without effect. In acute diarrhœa of functional or catarrhal nature its action is admirable.

In the exhibition of T., it is advisable to always administer large doses, at least in the earlier stages; in adults 1.0 gme. (15 grn.) a number of times daily—better two or three powders at intervals of one or two hours; in children, 0.5 gme. (7), once, twice, or three times daily. After one or two days' use the dose may be gradually reduced.

A REMEDY FOR BLACK EYE

A WRITER in *Medical Progress* says in this trouble, as well as in rheumatism, sore or stiff neck, there is nothing to compare with a tincture or strong infusion of capsicum mixed with an equal bulk of mucilage of gum arabic, with the addition of a few drops of glycerine. The bruised surface is painted with this mixture and allowed to dry on; a second or third time, if necessary, speedily relieves.

Last summer Mr. Chesebrough, the originator of vaseline, mentioned a new preparation for these troubles, in which the capsicum was combined with vaseline and used as above directed. It was so successful in our hands that it is now almost a daily prescription.

NIKOLA TESLA, in experimenting with the Röntgen ray, thinks he has found a physiological effect which shows the existence of material streams penetrating the skull, so that it may be possible by these strange appliances to project a suitable chemical into any part of the body, bringing the internal organs as directly in contact with remedial agent, as is now the case with the throat or nasal passages. Tesla found under the influence of these rays a soothing effect, with tendency to sleep, and a sensation of warmth in the upper part of the head. Following up these observations, he thinks, will lead to important therapeutic results.

SURGERY WITHOUT PAIN.—A recent meeting of the Philadelphia County Medical Society was rendered particularly interesting (*Am. Med. Rev.*) on account of the presentation of a paper by Dr. T. Parvin, on the new method of abolishing the pain of surgical operations without the necessity of employing ether or chloroform. This is the system suggested and practised by the well-known German surgeon, Schleich, who, by its use, has been able to perform practically all of the minor and many of the major operations of surgery without the slightest pain to the patient, and without depriving him in any other way of his consciousness.

By the method of Schleich there are prepared three solutions of common salt, in which are dissolved different quantities of muriate of cocaine and morphia. The part to be operated upon is thoroughly cleansed with an antiseptic solution, and the surface brought to a low temperature by a spray of chloride of ethyl. Into this area of the skin, which, by the action of the spray, has been deprived of all sensation, the salt solution containing the cocaine and morphine is injected by means of a special hypodermic syringe, numerous punctures being made in all directions. This renders the deeper structures insensible to the surgeon's knife, and from a period of from twenty minutes to half an hour the patient is not conscious, so far as actual pain is concerned, of extensive cutting and sewing.

The new method differs in an important degree from the ordinary employment of hypodermic injections of cocaine. The strength of the drug which has been used in the past is about 1 part in each 25 parts of the solution, while in the Schleich method there is often employed a strength of only 1 in 10,000. In the former, however, only a few drops of the solution are employed, while in the latter the tissues surrounding the part to be operated upon are thoroughly infiltrated with the solution. With the small quantity of the cocaine employed by Dr. Schleich, it is apparent that something more than cocaine is responsible for the local anæsthesia so perfectly obtained. In the opinion of Drs. Keen, Ashhurst and Morton, who discussed the merits of the new system, the infiltration of the tissues with the solution, and the distension and consequent pressure upon the small nerves were responsible in a large measure for the absence of pain when the incision by the knife is made.

To indicate the manner of employing the method of Schleich, and to show the entire absence of pain, one of the surgeons had the solution inserted beneath the skin of the arm and an incision an inch long made and sewed up before the Society.

OPIUM.—Physicians find no better nerve stimulant among the so-called narcotics than opium; the great trouble is in the tendency to push it too far, obtaining its narcotic rather than its tonic action. In small doses, when specially indicated, it acts better than caffein, Kola nut or cocoa. An exceedingly interesting work has recently been issued by the Harpers, by Edwin Ford Weeks, entitled "From the Black Sea Through Persia and India." Some of the facts he presents, drawn from personal observation and from the records of the medical staff of the army, are worthy of careful notice.

"Wherever," he says, "a medical officer reported on the condition of his men just returned from active service in Burmah or elsewhere, it appeared that the best soldiers, morally and physically, those who were always exempt from such maladies as dysentery, fever, cholera and rheumatism, were the opium-eaters; they were able to go longer without food or stimulants, and to do more work. The testimony of physicians, both European and native, was almost invariably in favor of the drug, when used moderately, in the simple form known to native consumers. Surgeon-General Sir William Moore said 'he had often smoked opium, and really did not see where the wickedness and immorality came in. As a matter of fact, one might see more wickedness and immorality in a London gin-shop in half an hour, even on a Sunday night, than in an opium-shop during a whole year.' It has been found that opium is cheaper than wine or spirits, less detrimental to the system, and just the right agent to stimulate the indolent Oriental nature, as well as to counteract the weakening effects of a vegetable diet and scarcity of food. Many a poor 'Ryot,' who can hardly pull himself together for the want of proper nourishment, is enabled by its aid to do a good day's work, while at the same time it serves him as a specific against the maladies resulting from unhealthy-surroundings. * * * While scientists, philosophers, and empirics in Europe have been experimenting for ages to find the Elixir of Life, these simple Orientals have contented themselves with producing, by Homœopathic doses of opium, effects analogous to those hoped for from the discovery of Dr. Brown-Séquard; and, if they have not succeeded in renewing their youth, have certainly managed to make it last longer."

INFLUENCE OF MUSIC UPON THE HAIR.—A recent inquiry into this subject by an English physician has developed some singular facts, which are stated as follows in *La Revue Medicale*: Baldness affects about 12 per cent. of the entire male population; but in the case of doctors this proportion is doubled. Composers of music belong to the general average; while instrumental performers, with certain exceptions, almost invariably retain their locks until quite late in life. *Brass* wind-instruments are fatal to the growth of hair; the trombone especially is said to denude a player's scalp in less than five years. Just the opposite effect is produced by the piano and the violin, which both prevent and arrest the falling off of the hair, as is proved by a long list of European virtuosos who have died at advanced ages with magnificent *chevelures*. No explanation of these statistics is attempted by the author; but they can be verified, he says, by observing the musicians in theatrical orchestras, and also the members of regimental bands, among whom "trumpeter's baldness" is proverbial.

ASBESTOS FOR SURGICAL DRESSINGS.—In a paper read at a meeting of the McKean County (Pa.) Medical Society, Dr. E. O. Kane advocates the use of asbestos as a surgical dressing. He regards the fibers of this mineral as admirably fitted by their softness for this purpose, and on account of their non-combustibility they can be readily and completely sterilized by exposure to fire. "Appreciating the difficulty one is under in preparing dressings that shall be positively aseptic," he writes, "and of retaining them so for any length of time, it had always been my custom to have them all thoroughly impregnated with bichloride of mercury, iodoform, or boracic acid, as shortly as possible before using them. This procedure entailed much loss of valuable time, and when operating in accident cases at a distance from my hospital, I was always in dread lest, during transportation to the scene of action or after being spread out among the flies and dirt upon the table of the farmhouse or lumber shanty, or upon the cushion of a cabin car, a new horde of germs find entrance to them. I am, therefore, satisfied that my present method of using only fireproof dressings, besides saving time, is the only safe one to pursue, and the results which I have obtained since making use of them have more than justified me, I am sure, in so believing. Asbestos dressings of all kinds can be kept as carelessly as if they were germ proof. * * * My custom is now to carry with me in my buggy case a compact parcel (abestos materials are very compressible) containing a sufficient supply of dressings of every sort necessary to meet the requirements of general operative surgery. When preparing for an operation I lay out upon a table, board or chair the amount and sort of asbestos material which I expect to use. When the operation is completed and I am ready to apply the dressings, I instruct my assistant to place them upon the coals or in the flames of the nearest stove or fire and allow them to remain there for a few moments, usually until they begin to assume a cherry red, and then remove them with a tongs, fork, or whatever else is convenient, and spread them out before me on a clean napkin or piece of paper. Then I dust them with iodoform, aristol, or other antiseptic powder, should such be desired, and, as they cool rapidly, proceed at once to apply them to the wound. When working in my operating room I have a specially constructed receptacle made of wire netting, not unlike a griddle, in which to retain the dressings while subjecting them to heat. I find this unnecessary and cumbrous, however, to carry with me about the country, observing that an ordinary tongs or toasting fork answers the purpose. Asbestos goods are now manufactured in such variety of forms that even from a country hardware store the surgeon can supply himself with the materials necessary to dress every kind of wound or injury.

A MATERIA MEDICA conference will meet in Detroit, June 16th, two days preceding the meeting of the American Institute. One of the leading questions to be discussed is: "Has the law of similars ever been unequivocally demonstrated by the deductions from general practice, and do we not require its more formal proof by inductive experimental research?" Dr. Conrad Wesselhoft will present the scientific side of the question with his usual ability and impartiality. Dr. Wesselhoft's statement of facts and his deductions, will form an interesting chapter in therapeutic science. No more interesting or profitable subject could be discussed at the present time than that which will come before this conference and we trust it will be met in that judicial and thoroughly scientific spirit which can alone give it value and practical importance in this age of demonstrated fact rather than theory.

THE Board of Health are maufacturing a stronger and more concentrated antitoxin, doing away, to a certain extent, with disagreeable symptoms. The new preparation is furnished to institutions free, and to the profession generally, at the cost of manufacture.

COUNTING BLOOD-CORPUSCLES. Dr. Judson Daland, of Philadelphia, has invented an instrument for counting blood-corpuscles, according to the *Physician and Surgeon.* It works on the centrifugal-force principle, and accomplishes the measurement by means of comparative bulks. A quantity of blood is placed in a finely-graduated tube and the latter revolved at a speed of about 1,000 revolutions a minute. The corpuscles divide by force of gravity, and form on the side of the tube in easily-traceable divisions of red corpuscles, white corpuscles and serum. The new method permits of larger, and, consequently, more representative quantitatives being used in experimenting, besides doing away with actual microscopic counting.

SOCIETY REPORTS.

SOME VAGARIES IN RECTAL PRACTICE.*

By Joseph M. Matthews, M.D., Louisville, Ky.

In an address before the Louisville Clinical Society, the speaker in part said: It is nearly universal with authorities to divide external hemorrhoids into two different kinds—one a tag of skin, that may become inflamed under certain conditions, and the other a trombus, or rupture of a blood vessel, and the running of blood out into the tissues. The majority of those who have written upon the subject believe that external hemorrhoids of the second variety—a blood clot—may be caused by pressure of the child's head, in parturition, for instance, and that it amounts to only a dilatation of the blood vessels, with a contained clot. Experience and investigation have taught me that this is not true, but that there is necessarily *rupture* of a blood vessel and the flowing out of blood into the tissues, in which it coagulates. Therefore, I have been led to believe that this variety of external pile is not often caused by pressure of the child's head, tumors or what not, but by force; a strain, a blow, a kick or anything that would rupture the blood vessel, often constitutes the cause of the second variety. That the other variety—inflammation of a tag of skin—does often occur is no doubt true, as far as the diagnosis is concerned.

As regards treatment, authorities advise that external hemorrhoids should be lanced; that a bistoury should be run through them and the clots turned out. There never was a greater vagary in my opinion than this. When it is considered that a person suffering from this variety of hemorrhoids is an invalid for two or three weeks from excessive pain, caused by the inflammation, the procedure is not a very small affair. If we follow the universal practice of lancing an external hemorrhoid to let the clot out, any one who has ever practiced this method has seen that he causes a condition which will last longer than it would take Nature to reabsorb the clot. Therefore, in lieu of accepting this doctrine, I remove the *entire* pile by pinching it up with a pair of forceps and extirpating it, leaving simply an open wound, and in from twelve to twenty-four hours the patient is able to resume his business, only a small wound remaining to heal by granulation.

It has become the common expression that all operations for hemorrhoids can be done under the effect of cocaine. This practice should be condemned by every physician and surgeon, not only on scientific but also on practical grounds. It can be demonstrated that cocaine is more dangerous than any general anæsthetic. There have been more deaths reported from injecting the tissues around the rectum with cocaine than have been reported from both ether and chloroform combined. Cocaine is going forth to the profession in the writings of its advocates as a very simple anæsthetic in dealing with hemorrhoids, and it is said to be devoid of danger, while it is an incontrovertible fact that death is much more common following operations upon the rectum since cocaine has been used. The patient should always have general anæsthesia for rectal operations, no matter what the nature of the procedure may be.

Internal Hemorrhoids.—I shall not discuss the pathology of internal hemorhoids; it is a mooted question as to exactly how this tumor is formed. More especially do I want to speak of the fact that all conditions around the rectum, at least nearly all, are generally called hemorrhoidal, when in truth this is a great vagary.

As regards the *symptoms of hemorrhoids,* those laid down by authorities, some at least are vagaries. Internal hemorrhoids, without complications, really have no symptoms. If the pile is a small one that does not bleed, it cannot be noticed by any symptom; if it is a well-formed tumor, an internal hemorrhoid, it has no symptom except protrusion. Whenever there is pain, whenever there is simple itching or any of the other so-called symptoms of hemorrhoids, this is simply a complication.

It seems to be the common opinion that internal hemorrhoids are easily diagnosticated, not only by prominent symptoms, but by touch, by making an examination of the rectum with the finger. I want to make the point very positive that it is the only condition or disease of the rectum that *cannot* be diagnosticated by touch. Hemorrhoids may be ever so large and yet not be detectable in this manner. There is no way of diagnosticating internal hemorrhoids except by visual inspection if they have protruded, or by a specular examination.

Another vagary is that small piles, of the *capillary* variety, amount to but little, when in truth they are the only dangerous variety of hemorrhoids, either external or internal. Many persons have lost their lives through a small internal capillary pile bleeding.

Another mistake, I believe, is the *classification* of internal hemorrhoids. Authorities universally classify them as *arterial, venous* and *capillary.* I do not believe there is any internal pile that does not partake of both the arterial and the venous variety—whether one predominates over the other no one is able to say. One is as much venous as it is arterial, and *vice versa.*

As to the Treatment of Hemorrhoids.—If I were to follow my own inclination in the treatment of internal hemorrhoids I would be too dogmatic, because I would say, use carbolic acid injection *never.* I would be inclined to say, use the Paquelin cautery *rarely,* when there is so simple an operation, one so devoid of danger, and so easy of execution, as throwing a ligature around the hemorrhoid, transfixing, and removing it. By this method the blood supply of the part is effectually shut off; there is very little danger of septic infection, and I do not believe as much can be said of any other method. I regard this treatment as superior to all others as far as this affection is concerned.

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* Louisville Clinical Society. An abstract of Dr. Matthews' paper, and discussion, stenographically reported for this journal by C. C. Mapes.

Fistula in Ano.—I suppose mistakes are made every day in the diagnosis of fistula in ano from one standpoint—that is, the character of the fistula with which we have to deal. Authors are not sufficiently explicit; they do not go into the details with a minuteness commensurate with the gravity of the condition. It is not enough to say that fistula in ano is a sinus, with an *external* and an *internal* opening, constituting a *complete fistula;* if with an external opening, being an *external incomplete fistula;* or if with an internal opening, constituting an *internal incomplete fistula*, when we remember that it is one of the most destructive conditions from which the human body can suffer. I have seen fit to make a different division than other authors make in this disease. My division has been *progressive fistula and non-progressive fistula.* There are many conditions about the rectum in which we can advise a patient against operative interference. If there is no physical defect, we might in some cases say that the fistula would not injure the patient. We have seen men who could go through life with such a condition without apparent harm. But if one applies this rule to all fistulæ he will wreck his patient, and perhaps cause death from sepsis in the course of a few weeks, certainly in a few months, if the fistula is of the *progressive* variety; I mean by this a condition attended with an acute inflammatory action and rapid burrowing of pus. We know that pus will burrow, by continuity, into the vagina from the rectum; it will burrow to, and even into, the bladder, from the rectum; it may destroy the perineum, especially in the female; it will often extend into the buttocks, undermine the sphincter muscle, etc., and do so very quickly, Under these conditions I say that every surgeon having the welfare of his patient at heart should advise an *immediate* operation for the fistula.

Fistula in ano in the female is a very serious condition. I have now under observation a young married woman who had an abscess in the left side of the rectum extending to the labia, which was allowed to go for two months without being opened, and at last was lanced. I have been three months trying to cure the fistula. I doubt if I succeed, because the process has by its destructive course branched through the perineum, involving the vagina and the sphincter muscle, with different channels running in many directions. Any surgical attempt at cure must of course destroy the septum, and also the sphincter muscle. I do not think enough attention is given to the respective difference occurring in the male and female.

Another vagary is, placing the greatest stress upon finding the *internal opening of a fistula.* I have spoken of this before, and have had my views criticised. Every surgical work gives general directions for finding the internal opening of a fistula when there is an external opening. Of what importance this is to the surgeon I have never been able to understand. I have had several patients come to me to be operated upon for fistula who had been refused by other surgeons, because the latter could not find an internal opening. That a person has a fistula is proved by the fact of the existence of the external opening; it is not necessary to use a probe at all; the condition calls for an operation. The fact of there being an external opening is enough to decide in favor of an operation; the fistula should be freely slit up, following the channel to the bottom, and, of course, the internal opening will then be found. That a surgeon should refuse to operate because an internal opening cannot be found before the operation is to me a vagary.

Ulceration of the Rectum.—Ulcerations of the rectum from *benign* causes are usually simply erosions, and are very small affairs. In an experience of eighteen years, my record book will not show a dozen cases of *benign* ulceration of the rectum.

I believe there is only one mode of treatment for tuberculous ulceration of the rectum, and that is thorough *curettement.*

My experience has been that when ulceration exists in the rectum to any degree, it is due to a *special diathesis*—malignant, syphilitic or tuberculous.

As regards *carcinoma of the rectum*: Perhaps my views are sufficiently well-known in regard to colotomy for carcinoma of the rectum not to require any further mention, and all that I shall say is that I am nearly convinced that any operative procedure upon the rectum for carcinoma is unwarrantable in the larger percentage of cases. Kraske has done the profession good service by telling us of his method of extirpating the rectum. It may be said of his operation that by it more of the rectum may be removed than by any other method; but I think the surgeon should consider a little more than that, and that is, whether he is justified in performing any severe operation upon a patient when he recognizes that very little, if any, good will thereby be accomplished. I do not believe, therefore, that when carcinoma exists, involving as much of the rectum as would warrant Kraske's operation, one case in ten would justify the operation.

I read once, from the pen of a distinguished gynæcologist an article in which he said he doubted very much whether hysterectomy should ever be performed for carcinoma of the uterus. I am very much inclined to adopt the views of this gentleman, as far as carcinoma of the rectum is concerned.

Kraske's is a difficult operation, and the man who undertakes to extirpate the rectum by this method, with the idea that it is an easy procedure, will find himself very much mistaken. Of all operations that I have ever undertaken, complete extirpation of the rectum is one of the bloodiest and most difficult that I have ever witnessed or tried to perform. Are we warranted in doing so fearful an operation when we can promise so little? Mayhap there is some little relief, perhaps none.

I shall not take time to speak of the vagaries of *orificial surgery*, except to denounce it. There is not a day passes but I find some new evidence against this fearful criminal practice. Men in every city of the Union are given to cutting out the rectums of men, young girls, boys and infants for relief of diseases outside the rectum. They are running wild with the idea of reflexes from the rectum, and healthy rectums are extirpated for so-called heart disease, dyspepsia, neurasthenia, etc. I think the profession at large should be outspoken in this regard; not that we have anything personally against the operators, but to save human life and human wretchedness. If medical men were aware of the number of people who have submitted to this outrageous practice—it is more than a vagary—they would agree with me that it should be denounced by every medical journal and every medical man in the United States.

Another vagary, I take it to be, is the frequency with which *prolapse of the rectum* is supposed to exist. In my experience, extending over eighteen years, I have had but six cases of prolapse of the rectum in the adult. I have had several hundred cases of prolapse—so diagnosticated. It is true that a great many physicians call large protruding hemorrhoids prolapse of the gut. This is a mistake. When I say that I have only seen six cases, I mean in the adult. Young children often have prolapse of the gut which will take care of itself under simple treatment.

From the literature of the subject one would be forced to believe that the simple affection of *pruritus ani* was the symptom of some other trouble. Some very eminent authorities say that it is. I must differ positively from that position. I do not believe that pruritus ani is often a symptom of anything except *pruritus.* It is a distinct affection, not dependent upon nor a symptom of any other trouble. Pruritus that comes from a discharge from the rectum—that is, the itching—is not pruritus *per se.* Therefore, I believe that pruritus is a distinct disease.

Fissure of the Rectum.—I only want to speak of a vagary in this connection so far as the treatment is concerned. In my work on "Diseases of the Rectum," in commenting upon the different methods advocated by various authorities, I referred especially to the writings of Dr. Adler, of Philadelphia, and stated that I was sorry to see so learned an authority contending for local treatment of fissure of the rectum that occupied weeks and months to effect a cure, when relief could be afforded so quickly and so effectually by slight divulsion of the sphincter muscle. In the last few months a number of articles have been written on the subject of treatment of fissure of the rectum by local measures. Dr. Adler saw fit to reply to my criticism, saying that he believed that I was mistaken, that I was not borne out in my statement by facts as regards dilatation, when he had demonstrated that the condition could be cured by local applications.

I contend that there should be but one method of treatment, and that is dilatation. A word as to the method of dilating. Nearly every one who has written upon this subject has explained that they mean forcible dilatation; breaking the sphincter muscle if necessary. This certainly is a vagary. The more I treat fissure, the more I am satisfied it can be cured by slight dilatation, often by means of a small speculum, dilating until slight pain is evinced, and in the majority of instances the fissure disappears. Then, I say, what is the use of taking three weeks, three months or a year to cure a condition that can be relieved permanently in a few minures?

Fissures of the anus are often found in children, and can be cured by the mother simply anointing her finger and slipping it into the child's anus, practicing a little massage for five minutes at a time, and repeating this if necessary. If this plan is followed, a complete cure will almost invariably result.

DISCUSSION.

Dr. John Ford Barbour: I was particularly interested in what Dr. Mathews said concerning tuberculosis of the rectum; would like to ask whether in his experience it is common to find primary tuberculosis of the rectum, or whether it as a rule is secondary to tuberculosis in some other part of the body? I was called to see a young woman in the lower part of the city, who had been treated for some time by another physician for tuberculosis of the lungs, and she gave the history of a great deal of pain with her stools, and of passing about a half teacupful of pus with each stool. She did not appear to be very ill, but I found her temperature in the axillary region 105½ F. I took another physician with me and made an examination of her rectum, and found a small grayish ulcer about the size of a nickel just above the internal sphincter muscle, and, I presume, there were other ulcers further up the bowel where we could not get at them. This ulcer was dressed with a little iodoform, and the woman put upon constitutional treatment, also upon injections of linseed oil and iodoform; there has been considerable improvement. I have examined this woman's lungs very thoroughly, and cannot find any evidences of tuberculosis in any other part of the body except the rectum; there are no evidences of syphilis; there is no cachexia or other indications of cancer. I concluded that the trouble must be tuberculosis, and the fact that her husband has this disease would seem to justify this conclusion.

Dr. W. L. Rodman: I certainly feel very much indebted to Dr. Mathews for the thorough *resumé* of the different pathological conditions of the rectum, and think that he has rendered us distinct service, not only in regard to the pathology of these conditions, but also in pointing out to us how we can best treat them. From beginning to end, I, in my limited experience, am inclined to agree with almost, if not every, position he has taken in his rather extensive remarks. In the first place, I am ready to follow and accept his teaching as to the pathology and treatment of external hemorrhoids. While, as he has said, nearly all authorities advocate simply incising the external pile and turning out the clot, I believe that the doctor's practice is infinitely better. I think they should be excised and was under the impression until I heard his remarks, that many of the English surgeons followed this practice. Certainly in this country, however, the practice is well-nigh universal to simply incise the tumor and turn out the clot. I examined a man that I had treated by this method the other day. The tumor had recurred, and I found the patient in even a worse condition than he was before. The clot re-forms, it becomes more painful, inflammation results, and I have often myself felt that I have done the patient more harm than good by making an incision. Occasionally, in some of the smaller tumors, I have incised the clot and heard nothing further from them, but I am satisfied from my limited experience in this practice that the method the doctor has outlined is best suited to the condition, and for the last year or more have been following it, and have never yet had occasion to regret it.

I furthermore fully coincide with what he said as to the use of general anæsthesia in these cases, rather than cocainizing the tumor and removing it. I believe not only here, but in other situations, cocaine is a more dangerous agent than general anæsthesia. Many practitioners, to escape the dangers of general anæsthesia, which are real, simply assume greater dangers when they use a sufficient amount of cocaine to produce complete local anæsthesia of the parts to be operated upon. It requires a deeper degree of general anæsthesia for an operation in this situation than almost any other region of the body, so that to use a sufficient amount of cocaine to excise several large piles would be more dangerous than general anæsthesia. Cocaine is very rapidly absorbed into the system from the rectum, and its effects are often alarming. I have only used cocaine in this situation on one occasion, which was for an operation on an anal fistula. When the patient walked to the front door to leave my office I noticed something very peculiar about him; he walked as though he had been drunk. His symptoms caused me a great deal of anxiety, and were such as to suggest cocaine poisoning. I felt somewhat uneasy, and would not allow him to leave my office for an hour or two, because his condition was such that I was quite apprehensive as to ultimate results.

In regard to the pathology of internal piles: I was rather surprised to hear Dr. Mathews say that the ordinary strawberry or capillary pile was a more dangerous lesion than the other forms of hemorrhoids. I can understand how they would bleed freely at times, but it is not clear to me why they should bleed more freely than an ulcerated pile in the form of a tumor.

The next question touched upon: I am sorry he did speak further on the subject, and tell us the exact method in which he uses the ligature in removing internal hemorrhoids. Not long ago I read an interesting paper in *Mathews' Medical Quarterly*, by Dr. Dundore, of Philadelphia, concerning the use of the ligature in removing internal piles—he had written to a number of surgeons all over the United States, a half dozen of us here in Louisville, asking our methods of using the ligature. In reading the article very carefully I noted that the vast majority of American surgeons used the ligature according to the method of Salmon, which is improperly called the method of Allingham. I believe Dr. Mathews uses a different plan; I think he transfixes the pile, then ties on both sides.

Concerning the treatment of anal fistula: Dr. Mathews' remarks in this connection were very clear indeed, and I fully indorse them. I have always believed that it was utterly useless to prolong the operation in searching for a supposed internal opening; I can see no use of it, and have never been able to see anything rational in this plan of treatment. I have seen just such things occur as the doctor has spoken of. I have seen most excellent surgeons examine for thirty minutes at least for a supposed internal opening, which they failed to find. I have seen them try again and again and fail, and then decline to operate upon the case, because they could not find an internal opening. We may have a blind, or external incomplete fistula, without any internal opening at all. It has been my practice in operating upon such cases to cut from above downward, and in this way you are always sure to discover the internal opening if one exists. Another point Dr. Matthews makes, as to the progressive or non-progressive condition of fistula, I think is a good one; I had never thought of it in this connection before. Some of these fistulæ are the most intractable conditions or affections we have to treat.

The only other point, I believe, that I care to speak to, is the question as to whether or not we shall operate upon cases of malignant disease of the rectum. I am very glad to hear Dr. Mathews speak as emphatically and as positively as he does about the excision of the rectum for malignant disease. I have taken the same position, not only as to cancer here, but other points throughout the alimentary tract. It seems directly at variance with the pathology of cancer for a man to hope to eliminate the disease successfully by a surgical procedure, unless done at the earliest stage. These growths are never encapsulated; they always extend further than they seem to do, and the nature of the tissue is such that we cannot remove sufficient of it to give even a reasonable hope that the trouble will not recur very promptly. I believe the position he takes as to Kraske's operation is a fair and just one, borne out by the pathology of the disease. If there be such a condition of the rectum from malignant disease as would justify Kraske's operation, there is no reasonable hope that we can either prolong life or give decided relief. The trouble will almost invariably recur inside of three or six months. I have never yet myself seen a single good result after excision of the rectum. I think, however, this may be going a step too far; if the disease begins at the verge of the anus, and I know it does not begin here very often, or if the trouble has not extended beyond an inch or an inch and a half from the anus, we might practice excision with some hope of a radical cure, if the operation is performed sufficiently early.

Dr. Louis Frank: Concerning fissure in children: I have seen quite a number of cases of this sort, where there has been a great deal of trouble and constant crying. When this was cured by dilatation, as described by Dr. Matthews, all trouble was overcome.

Dr. T. C. Evans: In regard to the use of cocaine, I think the profession generally will agree with Dr. Mathews as to performing operations under cocaine. Those of us who use cocaine not only every day, but many times a day in nose and throat work, hardly ever have any signs of trouble from it; but it is always used with a certain amount of precaution, and I think when you inject cocaine into a point where you cannot control it and prevent its absorption into the general circulation, you are taking great risks, much greater than you would by giving general anæsthesia; particularly is this true in the vascular region about the rectum.

Concerning benign ulceration of the rectum: It seems to me that it is a very common idea among the profession that we have an ulceration of mucous membrane; for instance, an ulcer in the nose, in the throat, on the tonsils or on the palate, or in fact any other mucous membrane. If we stop and think a moment, we can come to but one conclusion, that when we see an ulceration of any mucous membrane, it is either malignant, tuberculous or specific. What Dr. Mathews has said in regard to ulceration of the rectum holds good in regard to all mucous membrane.

Dr. W. O. Roberts: I regret that I did not hear all of Dr. Mathews' paper. In reference to the treatment of fistula in ano, and especially as regards the internal opening—while I do not think it is necessary at all to defer the operation until an internal opening can be found, I do think it is very important in the operation, if it is found, to open it thoroughly. An internal opening can be very much more easily found under chloroform when the sphincter muscle is divulsed, than it can be without chloroform and without divulsion of the sphincter; but if I could not find it, of course I would not hesitate to slit up the fistulous tract as far as it could be traced. When I do not find an internal opening, I must say that I always feel uneasy about the healing of the fistula.

Concerning the ulcer of the rectum, spoken of by Dr. Mathews: It seems to me in a tuberculous ulcer of the size indicated, which had existed as long as claimed in this case, there would have been some deposit elsewhere, and I would rather be inclined to doubt that this was a tuberculous ulceration. It may be that this ulceration was increased and kept up by the treatment which the patient received prior to the time Dr. Mathews saw it.

As regards fissure of the rectum: I agree perfectly with Dr. Mathews that all fissures should be treated by divulsion, because it is a very simple operation, and one which hardly ever fails to cure the patient in a very few days. At the same time, I know that bad fissures can be cured without operation. I recollect several cases where I have gotten most excellent results by the use of an ointment suggested by Allingham, which is composed of eight grains each of morphine and ext. belladonna, and sixteen grains calomel, to an ounce of ung. sambuci. We find that doctors often prescribe ointments to be used in the rectum, and direct patients to put some on the finger and introduce it into the rectum. I claim that it is impossible; with a healthy condition of the sphincter muscle, ointment on the finger cannot be pushed into the rectum, consequently failure to relieve a case of fissure by this means is often due to the fact that the ointment does not come in contact with the fissure. The only way the ointment can be perfectly applied beyond the sphincter muscle is through what is called an ointment depositor. But I would not advise this method of treatment, excepting in cases where patients will not submit to treatment by divulsion; and in making divulsion I think it is very important that it be done carefully, not violently, so as not to rupture the sphincter or any part of the mucous membrane.

As to fissure in the child: I was a little surprised to hear Dr. Mathews say he advised the mother to use her finger every day, or every other day, as the case may be, to practice dilatation. I do not see any reason why the child should not be treated exactly the same as grown people.

Dr. Mathews' remarks concerning orificial surgery recall to mind the fact that I have under treatment now two cases of stricture in the lower end of the rectum, resulting from removal of what some call the "pile bearing track." Both of these cases were treated by a so-called "specialist." One of them applied to the specialist for something to correct a condition of his urine; he said his urine was very red. He had gone to a neighboring city and while there consulted a practitioner, who, after a careful examination, told him his whole trouble was due to "pockets" in the rectum. This doctor evidently removed the lower end of the bowel, resulting in an anal stricture, which was so tight that I could not get my finger through it. The other case was a lady who had some trouble, the nature of which I do not know exactly, but understand it was connected with the cervix. She said she was operated upon in about the same manner, with the same result.

I agree perfectly with what both Dr. Mathews and Dr. Rodman have said in connection with removal of the entire rectum.

Dr. Wm. Bailey (visiting): Earlier in my practice I gave chloroform very frequently for surgeons, and there is no surgical procedure which needs such complete narcosis as divulsion of the sphincter muscle. It is very seldom that I have felt safe in producing narcosis sufficiently profound that divulsion might be made without apparent suffering. I do not mean to say that the patient did suffer, because I was certain operation was not commenced so long as there was any movement, nor was there any recollection on the part of the patient afterward, but at the time suffering seemed to be intense.

In regard to fissure of the rectum: I fail to see how any possible good can be accomplished by such partial expansion or dilatation as Dr. Mathews refers to. The introduction of his hand is allowed by taking off the possibility of contraction by such dilatation, the parts for the time being paralyzed. I do not see how the simple introduction of a small speculum or the finger can produce any permanent results, because fæcal matter even passes larger than this, and if good can be accomplished by introduction of the finger, why does not long-continued constipation bring about the same result? If a fissure needs dilatation at all, it ought to be such divulsion as would give us complete paralysis, which would certainly accomplish very much more.

Dr. J. M. Mathews: Dr. Barbour, in his remarks, asked the question whether I had often met with tuberculosis of the rectum as a primary lesion, or whether it is most frequently secondary. In my experience the cases predominate to a great degree where the lesion is primary. I saw a case this afternoon in consultation with one of our physicians who is an able diagnostician, and who tells me that the patient has no lung deposit, but it is a clear case of tuberculosis of the rectum. My record book will show many cases of this kind. It would also show cases where from this tuberculous condition of the rectum other lesions have taken place, where the lungs and other tissues of the body have become involved secondarily. Therefore I have tried to be explicit in saying that I believe the only remedy is a free curettment of these ulcers, to prevent secondary deposit somewhere else. I am satisfied I have prevented many patients going on and having general tuberculosis by curetting the rectum. In Dr. Barbour's special case which he reported, I would be inclined to think, from the amount of pus he mentions as having escaped, that it was not from ulceration at all, but must have been from an abscess in connection with the tuberculous condition.

Dr. Rodman mentioned in regard to hemorrhoids, that he thought the English surgeons took the position that external piles should be excised. I know of no English authority who recommends such treatment. The almost universal custom, both in this country and in Europe, is simply to make an incision and turn out the clot as I have stated—the lancing process. The doctor also says he cannot exactly understand why I say the capillary variety is the most dangerous pile. If he will think for a moment of the pathology involved in the formation of an internal hemorrhoid, he will understand that it is formed by a plastic deposit, and by friction of the mucous membrane the membrane becomes very thick, and the deposit is sufficient to stop all bleeding. Where a capillary pile exists, we have not this protection, and excessive bleeding may occur. It is an arterial hemorrhage, and is dangerous. In one of the cases reported, as I remarked, the patient lost over a gallon of blood from an artery involved in a capillary pile. An ulcerated pile can bleed but little, from the fact that the plastic deposit at the bottom of the ulcer is sufficient to prevent much hemorrhage. I have never seen hemorrhage amount to anything from ulceration of a well-formed hemorrhoidal tumor in the rectum.

The doctor refers to the special method which I employ in ligating piles. There are a number of convenient plans. Dr. Outerbridge has devised a new operation in which he practically excises the pile, brings the mucous membrane together and stitches it. It is a tedious operation, and to my mind accomplishes very little. After the ligature has cut through it leaves a very small base, which may heal in a space of ten days. My method is to take no notice of the so-called "white line," or the line of division between the mucous membrane and the true skin. An expert operator could likely dissect a pile in this manner, but in the hands of operators not so skilled an artery might be severed, and alarming hemorrhage result. This has been done, and several deaths have been reported from such an accident. In lieu of that operation I draw the hemorrhoid well down with the forceps, including all superfluous skin, cut in the true skin to sufficient depth, then throw a ligature around the pile and cut it off

I am glad that Dr. Frank reports several cases of rectal fissure in children. One gentleman, in investigating this subject, sent out letters of inquiry to the different surgeons of the United States, and only three men replied that they had seen cases of fissure occurring in the child. I have seen many of them.

Referring to Dr. Evans' remarks in regard to the use of cocaine: The class of cases in which he would use it, about the nose and throat, would be comparatively free from danger, in contrast to its use about the rectum. The rectum, with its abundant lymphatics and blood vessels, very quickly absorbs the cocaine, and deaths have been reported from the injection of cocaine in the tissues about the rectum for operations upon piles. Dr. Evans also calls to mind that ulcers very seldom occur in the mucous membranes. All the benign ulcers that I have seen about the rectum, with the exception of a very few, in my practice, have undoubtedly been produced by contraction of the sphincter muscles, or traumatism about the *anus*. In the rectum proper it is very seldom that we find ulcers.

Dr. Roberts speaks of the necessity of finding the internal opening of a rectal fistula. It *would* be necessary to lay open a fistulous tract as far as the internal opening, there can be no doubt about that; but if the doctor will remember that in making the first incision for fistula we go down into the gut if it extends that far, and then divide the tissues. It matters not whether there is an internal opening, you have already gone entirely through the tissues to the mucous membrane, and if you fail to detect the internal opening, certainly the plastic exudation will be sufficient to close it if one exists, but I have seldom failed to find the internal opening if one exists, and I have never in my experience had a patient return to me because of this internal opening not being closed.

Dr. Roberts also speaks of fissure of the rectum, and believes many such cases can be cured by treatment rather than dilatation. There can be no question about that, but the patient is made to suffer for weeks, perhaps months, because of this fissure and the local treatment, when by a simple surgical procedure he can be cured almost instantly. He also says that fissure in the child should be subjected to the same treatment as in the adult. The sphincter muscle of the child is very slightly formed; it requires only a mild effort to dilate a child's rectum, and the muscular fibers are such that they easily yield to the slightest dilatation. Children, as a rule, do not have well-formed fissure; it may only be a crack in the mucous membrane. In my last case four efforts of the mother, by introducing her finger into the child's rectum and practicing gentle massage, entirely cured the fissure. I do not think it necessary to chloroform a child, for the manipulation is not painful.

Concerning the remarks of my friend, Dr. Bailey: It is not necessary to paralyze the sphincter muscle of the child at all. My preference is to use a small-sized speculum, although the finger will perhaps do as well, and make a slight dilatation without chloroform.

FRENCH MEDICAL SOCIETIES.

THERAPEUTIC SOCIETY.

Ichthyol.—Dr. Maylander, of Fiume, reports the use of ichthyol in gonorrhœal epididymitis. He recalls the fact that Unna was the first to recommend sulfo-ichtyolate of ammonia, from which, in numerous and various cases, he obtained always favorable results. Subsequently this remedy was employed with often brilliant results, in certain dermatoses, in inflammatory affections of the uterus and its annexæ, in erysipelas, rheumatism, etc. He also experimented with ichthyol in the syphilitic service at the hospital of Fiume, and following are the results obtained in blennorrhagic epididymitis: With this remedy the pain disappeared, also the swelling; and after four or five days the patients resumed their usual occupations. The blennorrhœa did not assume any special complication from the treatment. Dr. Maylander cited many interesting observations, and expressed the wish that these first successes would occasion a series of experiments on a more extensive scale. The following is his formula:

Sulfo-ichthyolate of ammonia.....	10 grammes.
Glycerine.........................	90 grammes.

External use.

Internal Treatment of Pulmonary Tuberculosis with Ichthyol.—Scarpa eulogized this very active remedy in the highest terms. Unna was the first to adopt it in dermatology, afterwards in gynæcology, and later still, internally. Its success was more or less marked in different acute affections, such as typhus, cholera, diphtheria, anginæ, articular and muscular rheumatism; in chronic diseases, pulmonary tuberculosis, bronchial and gastro-intestinal catarrh, neuralgia, etc. Nussbaum does not claim it to be a panacea, but as an useful auxiliary in those diseases in which hyperæmia and vaso-dilatation exist. Nevertheless, the trials of ichthyol as an internal remedy have not been made upon a large scale, but in Italy inhalations of ichthyol in chronic bronchitis, in grip and coryza, have given encouraging results, and according to Scarpa, it is an antiseptic remedy, very active in acute and chronic affections of the digestive organs. Moreover, it is an aliment that favors nutrition, and provokes the formation of organic albumin, arresting its decomposition. Ichthyol is well tolerated, even in as large doses as 5 to 8 grammes daily (Nussbaum). After its prolonged use, there is an increase in the weight of the body (Zuelzer, Cranstoom), and in the urine augmentation of the coloring matter, of sulphur oxide, diminution of previously formed sulphates, fixed elements, and azote. These different properties of great toleration, of remarkable action upon the nutritive exchanges, the antiseptic and vaso-constrictive qualities, legitimate the hypothesis of the favorable action of this remedy in tuberculous ulcerations, and tended to verify Scarpa's researches in 150 cases of pulmonary bacilli, both in private practice and in the general polyclinic at Turin. The remedy employed was the sulfo-ichthyolate of ammonia, which salt is more readily tolerated and more efficacious than the sulfo-ichthyolates of potassa and soda. The pharmacological preparation adopted was not in the form of capsules or pills, which often provoke irritation of the gastric mucous membrane and other digestive troubles, but a solution of ichthyol, one-third, in some vehicle, say, water, glycerine, rectified alcohol, essence of mint. This last liquid has the advantage of masking the disagreeable odor of the remedy; stronger solutions are badly borne, and the repugnance due to the odor, rather than the taste, completely ceases after a week. Begin with 20 drops daily, increase 10 every second or third day, according to the toleration of the patient, finally reaching 180 or 200 drops daily. The solution adopted by Cohn was 120 drops of a solution of 50 per cent. With the exception of a tonic regimen, with or without cod liver oil, with careful hygiene, patient being allowed to be in the fresh air, window open at night, disinfection of expectoration, no constriction of the abdomen, no remedy has given results equal to those of ichthyol. Of course, and that goes without saying, in case of special accidents, such as fever, sweat, digestive troubles, pain, etc., the old established symptomatic medication should be observed. Of the 150 cases above mentioned, 110 belonged to the infiltrated form, 40 to the destructive and cavernous form. Following are the results as observed: During the early days of the treatment, say from the fifth to the twelfth day, the expectoration was modified, became more fluid, whiter, less abundant and less purulent, with absence of the fetid odor, and nummular appearance, with decrease of dyspnœa. The third week, complete disappearance of fever and night sweats. At this period, the patient took from 60 to 80 drops of solution daily, or 20 to 30 of pure ichthyol. Then ensued a general amelioration, with increase of appetite and strength, with progress of the subjective, nutritive and apparent condition of the patient. Cure was obtained in seventeen cases, and for a long time after the treatment there was neither cough, catarrh, nor troubles of any kind whatever. In fifty-seven cases the expectoration was examined microscopically, before, during and after the treatment. In thirteen there was a complete disappearance of the bacilli, and in the others a notable diminution. Scarpa's conclusion from these observations is, that ichthyol is a remarkable and powerful agent in pulmonary tuberculosis, superior to gaiacol, and deserves to be tried freely and fully.

Photography of the Invisible and Its Applications to Surgical Diagnosis.—France: Prof. Lannelougue experimented in the hospital service of the "Hospital Trousseau" with the results obtained by Prof. Roentgen, and with the hope of confirming their application to surgery, and determining what was to be expected from this wonderful discovery. The distinguished savant presented, in his own name and those of MM. Oudin and Barthelemy, and for the examination by his colleagues in the institute, a series of photographs of several human members, which he had obtained for this purpose. The first represented a femur affected with osteomyelitis. M. Lannelougue remarked that this proof confirmed what he had previously demonstrated. That is to say, that in this affection, the destruction of the bone began from the center to the periphery, and did not proceed from the periosteum to the center, as has been heretofore believed. The central portions, destroyed and converted into caverns, were traversed by the light, and formed white spots, as seen on the proof. The second photograph was that of a tuberculous affection of the finger of a child. A clinical diagnosis had been made, and the photographic proof confirmed it experimentally. The first phalanx was larger and thicker than that of the other fingers, and the thickening and infiltration of the periosteum by fungosities of peri-osseous tissue were clearly seen, the articulation, larger than others, was but slightly affected. Finally, the second phalanx was more transparent than all the others of the same hand, and had become the seat of an osteitis just beginning. The third proof was not so good, perhaps because the tissues which were photographed had been macerated in alcohol for many years. In effect it was a photograph of an anatomical specimen taken from the museum of the Trousseau Hospital, one hand affected with tubercular osteitis of the carpus, and a white spot, which corresponded to the part affected, was distinguished exactly. M. Lannelougue concluded that these results, though defective, justified a favorable appreciation of this method as respects its application to surgery. At Montpellier Prof. Imbert made different, but conclusive experiments at the Institute of Physics and Chemistry. Austria: At Vienna, Dr. Mosetig has just made the first trials of the practical application of Roentgen's discovery to surgery, and with full success. Having to perform two operations, he previously took a photograph of the parts involved, according to Roentgen's method. In the first case, the image revealed to him, with absolute precision, the course and position of a ball from a revolver in the hand that had been wounded. In the second case, that of a young girl affected with a malformation of the foot, he was informed exactly as to the seat and extent of the injury, and with a perfect knowledge of the cause, he proceeded to operate. M. Spiess also photographed at Vienna the hand of a worker in glass, containing a portion of glass for many years. The photograph revealed the exact locality of the foreign body. Germany: At Berlin, M. Neuhaus exhibited to a scientific body photographs taken by the Roentgen rays. They were rather photographic silhouettes. He said this phenomenon is interesting to physicians, because there are bones and metals, like lead, which are with difficulty permeable by these rays. Experiments made by Prof. Slaby, in presence of Emperor William at the Polytechnic School of Charlottenburg of Roentgen's discovery, succeeded perfectly, thanks to a perfected apparatus that had been put at his disposition. Photographs of the skeletons of chickens and mice were made with astonishing distinctness.

BIOLOGICAL SOCIETY.

M. Monier addressed a note upon the hemorrhagic secretions of different microbes, and his conclusions are analogous to those of M. Charrin upon the pyocyanic microbe. In effect, he proves that by the alteration of the blood which different microbes cause, they are veritable hemophilic agents.

M. Méry reported two cases of infection produced by subcutaneous injections of caféine. In one of the cases the abscess contained pneumococci, and in the other, streptococci. The last patient was affected with scarlatina, and M. Méry thought that the infection of the walls of the cavity determined by the infection was reproduced by the blood.

MM. Roger, Gilbert and Cadiot continued their researches upon the tuberculosis of birds as compared with the human. They concluded that the two forms of tuberculosis are only two varieties of the same kind.

M. H. Claude reported two experimental observations of hemorrhage of the biliary vesicle. The first case was that of a rabbit slowly poisoned by pyocyanic toxine; the second, a guinea pig, received the virus of tetanus. The biliary vesicle presented effusions and slight ulcerations of the mucous membrane, with hemorrhages and formation of clots, in which different microbes appeared in the ductus choledochus. M. Claude thinks that a similar process occurs in man in the course of infectious diseases.

M. D'Arsonval showed that electric currents of high frequency exercised a very appreciable attenuating action upon the virulence of microbic toxines. In a new series of researches it was proved that the same currents did not appear to act on the microbes themselves.

M. Chretien has studied the action of the contents of tuberculous caverns when filtered and injected into the ear of a rabbit. A sensible thermic elevation is the result, and he thinks that the hectic fever of consumptives may be explained by the absorption of the products of the caverns. M. Hallion and M. Franck investigated in the laboratory of the latter professor, the influence of the sympathetic nervous system upon the intestine. On measuring the differences of volume of the intestine by means of a special method, and then irritating the sympathetic chain, it was found that the vaso-constrictor nerve-fillets began about the fifth dorsal nerve, and the vaso-dilators about the eleventh dorsal. The union of these fillets constitute the splanchinic nerve. MM. Dejerius and Thomas found in subjects affected with descending degeneracy of the medulla, that the direct *pyramidal* bundles descend to the upper part of the fourth sacral vertebra, and the direct to the "filum terminale." M. Imbert, of Montpellier, exhibited photographs taken by the Roentgen method, and obtained after a few seconds' application. Especially successful was the finding and locating a needle in the hand of a young girl.

ACADEMY OF MEDICINE.

Pulmonary Vaso-Constrictive Action of the Great Sympathetic.—M. Francois Franck has succeeded in demonstrating, by a series of experiments, the pulmonary vaso-constrictive action of the great sympathetic. Reflex spasm of the pulmonary vessels constitutes the principal condition of acute dilatation of the right heart, in painful affections of the abdomen. But it is necessary that the cardio-inhibitory nervous influences should be brought into play simultaneously. These diminish the resistance of the myocardia, which permits distension. Nasal irritations also provoke spasm, and so we are enabled to understand their influence in asthma.

Preventive and Immunizing Action of Drugs.—M. Laborde shows that this action may be compared, as in the case of the sulphate of quinine, for example, and the preventive action of the antitoxines. By the employment of a bromide the development of an epilepsy, which is easily realized experimentally in the guinea pig, can be prevented by a section of the sciatic nerve. Curare, which is a good immunizing agent against strychnine, would perhaps have an analogous efficacy against the toxine of tetanus.

Inhalations of Formol.—M. Lancereaux presented an apparatus of M. Hamel, for the inhalation of formol in tuberculosis, in bronchial dilatation and pulmonary gangrene. The inhalation diminishes cough, and the abundance and fetor of the expectoration.

Tuberculous Contagion in Hospitals: Renewal of the Discussion.—M. Jaccond considered this contagion not from a practical point of view, but from one rigorously scientific. The statistics, demonstrative as they seem to be, and bearing upon hospital personality, and not upon patients, do not give a rigorously experimental demonstration. In effect, it is always possible that contagion may be effected outside of the hospital, before entering it, or after leaving it. Again; 40 per cent. of subjects dead from disease other than tuberculosis, exhibit, upon autopsy, Koch's bacilli in the mediastinal ganglia, demonstrable by the inoculation of the guinea pig. The clinique sometimes shows a reawakening of latent tubercle, and M. Jaccond cited an observation of a thoracic wound which had determined a localized tuberculosis of the pleura, without any recognizable lesion of the lung or other viscera. Koch's bacillus may exist in a latent state in the organism of a patient before entering the hospital, and so the hospital origin of the tuberculosis always remains impossible to demonstrate scientifically.

This most important and interesting discussion will be continued.

MEDICAL SOCIETY OF THE HOSPITALS.

M. Chaput reported a case of gastric ulcer with a large tumor. Gastro-enterostomy was practiced, the patient rapidly cured, and no more vomiting. The tumor continued to be indolent, the stomach dilated, patient digests solid food, and has gained flesh. Considering the age of the patient, and her long survival—eighteen months—the diagnosis of cancer is inadmissible. M. Chaput then presented specimens taken from a patient operated upon by M. Mathieu for a muscular contraction of the pylorus. The operation was performed with the button of the operator; sutures perfect, but the patient succumbed to shock.

MM. Roger and Josue, in order to elucidate the pathogenesis of appendicitis, practiced ligation of the appendix, after having injected a few drops of a virulent culture of the bacillus coli. The animal died in fifteen days, and the autopsy revealed suppurative appendicitis with peri-appendicitis. By practicing ligation only, and destroying the animal three months after, the part of the appendix isolated by the ligature is seen to be transformed into a cystic pocket, not communicating with the rest of the intestine, and containing a thick pus in which the bacillus coli was found in a state of purity. We may then conclude that a slight and aseptic obstruction of the appendix is sufficient to produce suppurative inflammation, by transforming an inoffensive intestinal microbe into a pathogenic agent.

M. Rendu: Similar clinical facts exist. In a phthisical patient he found the appendix closed and filled with pus. The preceding experiments show very clearly the pathogenesis of certain varieties of appendicitis.

MM. Sevestre and Mery: Many observations can be made upon the subject of the sero-therapy of diphtheria. First: the serum may develop in some cases an active eruption of urticaria. Second: In rarer cases, it may be followed by accidents, more or less grave, characterized by a polymorphous eruption, by arthropathy, and a general condition of disquietude. Subsequent accidents occur about the thirteenth or fifteenth day, last from one to four days, and terminate ordinarily by cure. These are never seen in cases of pure diphtheria, and are in relation with the infection by the streptococcus. The employment of the serum does not produce any accidents in the pure diphtheria; hesitation for its employment is admissible when the streptococcus is associated with the bacillus of Loeffler; it is useless in streptococcic anginæ.

M. Netter: The same accidents are observed with other therapeutic serums, an example of which was seen in the anti-pneumococcic serum of Mosny, and one with the serum of Maragliano.

M. Chantemesse proposed to substitute sero-therapy by the digestive passages for the subcutaneous injections. In twenty observations this mode of administration did not alter the action of the serums in the least degree.

M. Legendre cited a case of staphylococcic angina, with Loeffler's bacillus, in which the serum of Roux produced accidents which, for a time, threatened the life of the patient.

M. Gaucher observed identical accidents in a case of slight diphtheria.

M. Chantemesse thought that in this case it was the staphylococcus that caused the trouble.

M. Dieulafoy declared in his lectures before the Faculty, that he had clearly established the facts, both anatomically and bacteriologically, as respects appendicitis in man, that were confirmatory of the experiments of MM. Roger and Jòsue. Appendicitis is always the result of the transformation of the appendicular canal into a close cavity, whether due to its obliteration by the slow formation of a calculus, of a local infection or to a fibrous contraction, similar to that of the canal of the urethra. Many of these causes may be found united in the same subject. The symptoms of appendicitis, whether mild or grave, manifest themselves only when the transformation occurs, and at that moment the microbes of appendicitis, hitherto harmless, multiply and increase their virulence. The agents of infection, often grave in character, are the bacillus coli and the streptococcus. The patient may succumb from the appendicitis alone, or complicated with acute septicemia of the peritoneum without perforation, or from gangrene, followed by perforation with all its consequences.

M. Hutinel did not deny that the accidents which supervened from the injections of the serum of Roux, were due to streptococcic infection, but he remarked that neither the direct examinations of the mucus of the throat, nor the analysis of the blood, nor the autopsies, had established the fact. The gravity of the post-serotherapic accidents, from which children are seen to die, cannot be doubted. One has pharyngeal diphtheria, with streptococcic association, another diphtheria consecutive upon scarlatina. Both received Roux's serum, and subsequently presented albuminuria, anæmia, etc. M. Chantemesse thought that the serum protected the kidney rather than injured it. It is an error to pretend that the streptococcus is not found in the blood; he has proved its presence in numbers of instances. M. Sevestre cited a new fact in support of the theory sustained by him. A child, after suffering very acute lumbar pains, was taken with streptococcic angina; the serum was *not* injected. Some days afterwards he had articular pains, with an eruption over the principal joints. If he had received the injection the eruption would have been attributed to streptococci; there was no albuminuria. M. Legendre attended a child affected with diphtheria, that showed albumen in the urine on the fourth day after the injection of serum. This does not accord with the role of protection proclaimed by M. Chantemesse. M. Hirtz knew of two children that had never had albuminuria before the injection of serum, but were attacked a few hours after. If this is not the relation of cause and effect, the coincidence is, to say the least, very odd. M. Chantemesse: When albuminuria supervenes, it should be attributed to a secondary infection. M. Variot has had the care of 1,414 diphtheritic patients, so recognized from bacteriological examination at the Bretonneau pavilion. He lost 205—14.5 per cent. According to him, the accidents produced by the serum, were due, on the one hand, to a reduplication of albuminoid principles in the blood, and on the other, to an alteration in these last, which was prevented only by the employment of freshly prepared serum.

M. Chantemesse inquired of M. Variot if he had observed albuminuria in patients treated by serotherapy.

M. Variot did not believe that albuminuria was directly to be imputed to the serum, and he was able to determine, in a great number of cases, a diminution in the urine emitted. Albuminuria was only observed in very grave or toxic forms. M. Catrin believed that the serum was altered by age, and demanded that in France, as in America, the date of the fabrication of the serum should be indicated upon the bottle.

SOCIETY OF LEGAL MEDICINE.

M. Vallon related a case of cerebral traumatism, followed by cerebral troubles, dipsomania, etc. An officer, with no hereditary vice, and whose life had previously been honest and laborious, fell from his horse and seriously injured his head. For many days he continued in an unconscious condition; then left the hospital, and for three months suffered no inconvenience, with the exception of occasional noises in his ears. One day he fell in a faint, and a violent crisis ensued. Dating from that moment, he became erotic, a gambler and dipsomaniac with suicidal tendencies. This conduct was such as made punishment necessary, and he was obliged to quit the army. After some years he came to Paris and was attacked on the public street by a fit of mild delirium. The traumatism was manifestly the cause of the cerebral troubles. M. Garnier has observed several cases analogous to that of M. Vallon, the officer who, after his fall underwent the impulsive changes; became cerebralized, so to speak. There are hereditary degeneracies; this one was an acquired degeneracy, an auto-degeneracy. Such patients have no pathological heredity, but inherit of themselves. M. Vallon: It may be said in addition, that among many whose crania have been trepanned or wounded, they have become erotic. M. Vibert: A distinction may be made between intellectual and moral traumatism. In the adult, and especially in the old, the moral sense is less frequently affected by traumatism than in the child, whose development is yet to come. I have observed three traumatic neuroses in children, and in all three cases the moral sense was affected, and not the intellectual functions. M. Charpentier agreed with M. Garnier. He had seen two traumatics, who, while exempt from every hereditary vice, had become cerebralized, One of them became a general paralytic, the other continued mentally imbecile.

Treatment of Morphino-Mania by the Rapid Method.—M. Laborde presented a work by M. Sollier, demonstrating the advantages of rapid suppression; more scientific and shorter than the slow method, less dangerous and less painful than sudden suppression. No means of corporal restraint is necessary. But during the acute period of demorphinization the patient should be in a special establishment, and under the constant supervision of a physician. The duration of the treatment should be at least sixty days. Relapses are less to be feared with the rapid than with the slow method.

Application of Roentgen Rays to Surgical Diagnosis.—MM. Lanuelongue and Oudin have continued their researches by this method. In two subjects, one cured of an osteo-arthritis of the left knee, had previously undergone several operations. The other, a child of eight years, cured of an osteitis of the femoral diaphysis. Photographs of the regions, which accurately showed the condition of the bones and the articulations, were taken. In the present case, the photographs confirmed the indications as given by the clinic, but in other cases, it may readily be seen, they could rectify them.

Microbic Associations and Tuberculous Suppurations.—MM. Lanuelongue and Achard have investigated, with the view to determine if, in tuberculous abscess, the suppuration is the work of the bacillus of Koch alone, or of pyogenic micrococci associated with that bacillus. They have distinguished open and closed purulent deposits, and among them those which were evolved with all the phenomena of acute activity. The results obtained were as follows: The association of the pyogenic microbes with the tubercular bacillus is always the rule in the open deposits—five times in five. This has been the exception in the closed collection—six times in fifty-seven—and always coincided with acute phenomena. J. A. C.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Ergot in the Treatment of Uterine Fibroids.—(Abstract of a paper by Dr. Franklin H. Martin, in the *Journal of the American Medical Association*, March 21, 1896). The *physiological actions* of ergot are accounted for by its effects upon unstriped muscular fiber. It contracts blood vessels everywhere, thereby increasing the blood tension. The uterus, formed as it is by an enormous proportion of smooth muscular structure, is particularly susceptible to the peculiar action of ergot. It acts upon the uterus in four ways:

1. It decreases the whole bulk of the organ by producing a steady tonic contraction of all its muscular fibers. 2. It decreases the whole bulk of the organ by decreasing the amount of blood in its walls, as a result of contracting its blood vessels. 3. By decreasing the amount of blood in the uterus, it modifies materially its nutrition and decreases the amount of the menstrual flow of blood. 4. When given in large doses it not only produces tonic contractions of the muscular fibers of the uterus, but by instituting clonic contraction of its fibers, expulsion of natural and foreign bodies from its walls and cavity is effected.

Upon these thoroughly demonstrated effects of ergot has grown up a rational and very successful medical treatment of fibroids of the uterus.

Indications: The most favorable case for ergotin treatment in which a complete cure may be looked for is the intramural variety, which consists of one or few centers of development, with these centers situated in close proximity to the mucous membrane. The uterus in such a case is considerably enlarged, the canal is long and tortuous, the symptom of uterine hemorrhage is conspicuous, and the normal muscular tissue of the uterus is hypertrophied. Ergot given in such a case in large doses, continued for some weeks, will cause the hypertrophied muscles of the uterus to contract and to gradually squeeze the fibromatous center first toward the mucous membrane, then beneath the mucous membrane, and finally into the uterine cavity, where the uterine expulsive pains will effect its deliverance. The enucleation of such a tumor can be materially assisted, as it should be, by incising its capsule as it begins to protrude beneath the mucous membrane.

When such a center or centers are expelled effectually the uterine pains will cease, the hemorrhage will lessen, and the uterus will soon be found of normal size.

Pediculated fibroids are somewhat differently affected by ergot when they are sub-mucous than when they are sub-peritoneal. While in the latter case a gradual atrophy of the stranded mass *may* take place, this is much more likely to occur if the tumor is sub-mucous.

A *true interstitial fibroid* is seldom cured by ergot.

Prof. W. H. Byford begins a chapter on the subject as follows: "(1) When properly administered. ergot frequently greatly ameliorates some of the troublesome and even dangerous symptoms of fibrous tumors of the uterus, *e. g.*, hemorrhage and copious leucorrhœa. (2) It often arrests their growth and checks hemorrhage. (3) In many instances it causes the absorption of the tumor, occasionally without giving the patient any inconvenience. At other times removal of the tumor by absorption is attended by painful contractions and tenderness of the uterus. (4) By inducing uterine contraction it causes the expulsion of the polypoid variety. (5) In the same way it causes the disruption and discharge of the sub-mucous tumor."

Method of administration: According as the physician seeks a mild or an active effect of ergot should he regulate his dose. In the first case ergot is administered in doses just sufficiently large to maintain a tonic contraction of the arterioles and of the uterine tissue, without producing the pain which is a constant accompaniment of the violent clonic contractions of the uterus. When the active effects of ergot are sought, large and often repeated doses are administered in such a manner as to obtain prompt and full physiologic effects of the drug.

When mild effects are sought ergot can usually be administered by the stomach. For this purpose I usually employ the purified extract called ergotin, administered in the form of capsules. Capsules containing from 3 to 5 grains each, given at intervals of four to six hours, will seldom disagree with the patient. Ergot can be given with good results in mild doses in rectal suppositories.

Ergotin in capsules, in 5 and 10-grain doses, frequently will be tolerated by the stomach almost indefinitely. Occasionally a much smaller dose will be utterly rejected. Ergotin may then be administered in 8 to 10 or 15-grain rectal suppositories. Decided physiologic effects may frequently be obtained in this manner. The lower bowel should be kept clear of all fæcal matter and the suppository placed high. They may be administered as often as every six hours. Suppository tubes may be employed to advantage for the purpose of placing the suppository mixture higher in the bowel than is possible with the ordinary suppository. Small rectal enemas of the fluid extract may be employed as a means of obtaining the active effects of the drug.

Hypodermic injections of fluid preparations of ergot succeed in obtaining the promptest and most efficient physiologic effects of the drug. Abscesses may be avoided by attention to aseptic principles, and the pain may be materially avoided by selecting non-sensitive portions of the skin, combined with deep injections, and by the employment of a mixture containing one of the less harmful sedatives, as chloral hydrate or belladonna.

According to W. H. Byford, most American practitioners now use Dr. Squibb's purified solid extract of ergot, prepared as follows: Dissolve 200 grains of the extract in 250 minims of water, by stirring; filter the solution through paper, and make up to 300 minims by washing the residue on the filter with a little water. Each minim of this solution represents 6 grains of ergot in powder. Of this solution from 10 to 20 minims are injected once daily or once in two days.

Duration of treatment: As ergot, at best, can scarcely be termed an actual curative agent for fibroid of the uterus (except in rare instances), it follows that the duration of treatment must vary with the physiologic effects of the drug, under different doses, the variety and character of the tumor, and the results sought, as estimated by the judgment of the practitioner treating the case.

If the case is merely an ordinary bleeding interstitial fibroid of uniform contour, small doses of from 2 to 5 grains each of ergotin in capsules might be given three times a day for several months. If it is a sub-mucous fibroid in which the attempt is to be made to accomplish the expulsion of the mass, ergotin in form of large suppositories, or better, in hypodermic injections, will be administered until the result is obtained. When the tumor is expelled the remedy is immediately suspended. If the case is one of interstitial bleeding fibroid, ergot in good full doses, either by capsules, suppository, or hypodermic injections, should be commenced a few days before the menstrual period, and be continued until the flow has ceased, when it can be discontinued until a week before the next menstruation.

Results: The results obtained in the treatment of fibroid tumors of the uterus by ergot depend much upon the sincerity and persistency of the physician who is conducting the treatment. If he is sincerely desirous of exhausting the resources of ergot in these cases before resorting to more radical means, or better, if he is opposed to any more radical treatment than the ergot treatment for fibroids, combined, of course, with rational hygienic and general tonic treatment, he will be sure to benefit a large percentage of his cases, and possibly a small percentage will become actually cured.

Prof. W. H. Byford reports in his "Diseases of Women" 101 cases, including 27 of Hilderbrandt's, 9 of his own, 14 of White's, of Buffalo, and the remainder from a score of physicians. He summarizes them as follows:

"The total number of cases here cited is 101. Twenty-two of them are reported cured. In 39 more the tumors were diminished in size, and the hemorrhage and other disagreeable symptoms removed. Nineteen of the remainder were benefited by the relief of the hemorrhages and leucorrhœal discharges, while the size and other conditions of the tumors were unchanged. Out of the whole number only 21 cases entirely resisted the treatment. This shows results decidedly favorable in 80 of the 101 cases."

Hiccough Cured by Putting Out the Tongue.—A female patient presented herself at the Hotel Dieu, of Lyons, for a rebellious hiccough which had resisted all treatment for four days. She was asked to show the tongue, and it was noticed that with the putting out of the tongue the hiccough ceased. The same thing has since been tried, and with success, in other cases. All that is necessary, apparently, is to strongly push the tongue out of the mouth and hold it so for a minute or two. It is also suggested now to try the same thing in suffocative cough, as whooping cough and choking by irrespirable gases.

Eucalyptus for Chilblains.—It is said (*Drug. Circ.*) that oil of eucalyptus, frequently applied with a camel's hair pencil over the surface of chilblains, relieves pain and soon cures them.

The Properties of Goose Grease.—Langford Symes writes as follows in the *Dublin Journal of Medical Science* concerning the valuable medicinal properties of "plain goose grease," a substance for many years well-known in most households:

In affections of the chest it is a most excellent remedy to apply even alone. In bronchitis of the sub-chronic type, or what would best be termed "a cold in the chest," or moderate bronchial catarrh, few liniments or applications will be found to equal this "oleum anseris," or goose grease. If a drachm or so be placed in the hand of the rubber, and a stimulative liniment—such as is frequently prescribed for this condition—be poured thereon, it will be carried into the tissues in a remarkable manner. This was especially observed during an epidemic of influenza, in cases where some mischief remained unresolved in the lung, and that peculiar tenacious viscid secretion lay attached to its internal mucous or serous vesicular wall. The writer has seen goose grease remove, in a distinct way, muscular rheumatism when rubbed in. Thickening in the neighborhood of joints after sprains, or sub-acute rheumatic inflammation, will be greatly aided towards resolution by its use.

It has also been markedly beneficial in cases of wasting, or marasmus. When rubbed into the abdomens and groins of young children it is a decided nutrient, and experience will bring conviction of its efficacy. It can be eaten on bread, with salt, and in this way, if freshly prepared, is very palatable and nutritious. Active drugs incorporated with it, will, when applied externally, be under the best conditions for permeation through the skin, and it will not lie on the surface unabsorbed so much as other oils. It is liable to become rancid, but may be kept for many weeks by the simple addition of some boric acid.

For Insomia Due to Noise.—For those whose rest is disturbed by the noises of the street, by the howling of dogs, by the crowing of cocks, the cooing of doves and the various sounds which murder sleep in town or country, the following plan may be commended. Prof. Rosenbach, of Breslau, suggests plugs of cotton-wool steeped in vaseline, each six centimetres long, three centimetres wide, and one centimetre thick. The upper surface of the plug is smeared with vaseline, then rolled into the form of a cylinder and put into the auditory meatus to a depth of about two centimetres. The outer end is spread out in the concha, and outside this a layer of wool is applied. The plug is taken out in the morning, when the meatus must be well dried. Dry cotton-wool does not prevent the sonorous vibrations from reaching the tympanic membrane, but plugs greased in the manner just described do so effectually, though of course they do not prevent mechanical shaking.

New Device for Treating Pulmonary Affections.—A new instrument called the "Globe Nebulizer" has been devised for the treatment of the affections of the respiratory organs, and Dr. Chas. S. Turnbull, of Philadelphia, says it is one of the safest instruments in use for inflating, also medicating, the middle ear.

This device constitutes the nearest to perfection of anything we have yet seen in the direction indicated. All classes of medicinal agents, whether volatile or non-volatile, can be vaporized without the use of steam or heat, and applied, as indicated, to the respiratory tract, even to the remotest part, as conditions may require.

We are thus enabled to individualize our means in the way of drugs, and to saturate the atmosphere of the room with any agent desired.

Prof. Granger Stewart, of Edinburgh University, considered the apparatus as sufficiently important for him to devote space to it in the "Twentieth Century Practice," when referring to the treatment of bronchitis.

A great variety of formulæ are furnished, from which the physician may select, by the Globe Manufacturing Co., Battle Creek, Mich.

A Valuable Adjunct in the Treatment of Gout.—Before the true nature of the gouty diathesis was understood, the medicinal treatment consisted for the most part of the various preparations of colchicum. Although this remedy is still employed to a certain extent in this class of cases, it is no longer regarded as a specific, as formerly. When it had been satisfactorily determined that the manifold manifestations of gout were all dependent upon the presence of an excess of uric acid in the blood and other fluids of the body, a definite aim was given to the therapeutics of the disease. Remedies were now sought for which would keep the uric acid in a soluble condition, prevent its deposition in the joints and other tissues, and secure its elimination from the system by way of the urinary passages. The alkalies, especially the salts of potassium and lithium, were found to accomplish these objects, but only to a certain extent. While in some instances they effected marked improvement, in others they disturbed the digestive organs and had a general weakening influence. More recently piperazine was introduced as a uric acid solvent, and has been warmly recommended by many authors in the treatment of gouty conditions. It was thought, however, that by uniting piperazine with an alkali the combined effect of an alkaline salt and of this powerful uric solvent might be obtained, and this aim has been realized in lycetol, which is a tartrate of dimethylpiperazine. This new remedy promises to be the most efficient anti-arthritic yet placed at the disposal of the physician. Aside from its valuable medicinal properties, it has the advantage of being exceedingly agreeable to the taste and of not disordering the functions of the digestive apparatus, even when employed for prolonged periods. When given in 15 to 25 grain doses daily, lycetol promptly produces an increased elimination of uric acid from the system, relieves the pains and other discomforts of gouty patients, and if continued for some time will, in conjunction with appropriate local measures and general hygienic regulations (diet, exercise, etc), often cause the disappearance of uratic deposits in the joints and other structures.

Remedies in Neurasthenia.—Respecting the therapeutic value of remedies in neurasthenia, Prof. O. F. Pierce (*Med. Current*, May, 1895) concludes as follows: In looking over the remedies that seem to have the power to assist Nature in re-establishing its normal condition, we discover in gelsemium a remedy that spends its force on the motor nervous system. In phosphorus, one that works through the great vegetative system. In causticum, a remedy that acts principally upon the cerebro-spinal system, having marked influence upon the pneumogastric nerve. In hypericum, a remedy that spends its force on the cerebro-spinal system, having two special centers of action, nervous system and the joints. In belladonna, a remedy that has so wide an action that its service is usually employed in cases of this variety.

It is very clear that these agents are exceedingly valuable in the treatment of neurasthenics.

The success of our treatment is greatly influenced by the hygienic surroundings and the moral state of the patient.

Life in large cities will develop an irritable condition of the nervous system in some individuals, and unless this aggravation is removed, recovery will be almost hopeless.

The food must be carefully selected and the most nourishing diet employed, especially in the city, as surroundings are more enervating.

Piperazine As an Eliminant of Uric Acid.—Although it it still a disputed question as to what factors are concerned in the excessive formation of uric acid and its retention in the system, clinical investigations would seem to show that among all the remedies hitherto proposed for the prevention and cure of uric-acidemia, as it is now termed, piperazine deserves the chief place, both on theoretical and empirical grounds. The mistake frequently made in the use of this remedy, however, is that it is administered for too short a period to obtain positive and curative results, for it should not be expected that a brief trial of any drug shall effect an immediate and striking change in any condition of such chronic nature as the uric acid diathesis. Dr. Heerman, who published a number of cases successfully treated with piperazine, about a year ago, has recently reported that the favorable results obtained at that time have since persisted (*Therap. Monatshefte*, July, 1895). He also records several additional cases, of which three are especially noteworthy. The subject of the first, a man aged forty-four, had suffered since 1886 from attacks of renal colic, as was later shown by the passage of calculi in the urine. At the time of his first visit to the author, in 1893, he displayed an entire collection of calculi, some of which were as large as a pea. After having taken a course of the waters at Carlsbad he passed considerable gravel, and the attacks of renal colic recurred less often, but in September, 1894, had regained their former frequency. Resort was then had to piperazine with excellent results, the passage of a large quantity of fine, granular concretions and disappearance of the attacks, which have not recurred for seven months. The patient still takes the remedy for prophylactic reasons (1.0—2.0 gm. each week), and claims that its administration is always followed by an increased amount of gravel. The second patient, a man, aged fifty-two, had suffered from gouty attacks since 1881, which recurred every year, and lasted four to six weeks. When he came under the author's observation in the summer of 1893, his hands and feet were markedly affected, and despite the external application of ichthyol and the internal use of salicylate of lithium and bicarbonate of sodium, no improvement occurred. Some relief, however, was obtained from a course of warm mineral baths, and he was enabled to follow his occupation until the spring of 1894, when he had a serious attack. Piperazine was now employed in 0.5 gm. doses daily in soda water, and after its use for eight days the attack was aborted, and similar results were obtained in March of this year. In the third case a gouty swelling of the index finger of the right hand, also disappeared in the course of six days under the administration of piperazine, and no further extension of the disease took place. These cases fully attest to the value of piperazine as an eliminant of uric acid in the various conditions in which this is the aim of therapeutic endeavor. A most useful and convenient means for administering the remedy are the tablets of piperazine—Bayer—which represent an average daily dose.

Treatment of Nocturnal Enuresis With Large Doses of Atropine.—In obstinate cases of this complaint, which have resisted ordinary modes of treatment, and in which the patient has come to the age of puberty, MacAlister (*Dublin Jour.*) considers that the secret of success lies in courageous overdosing with atropine. Having ascertained that no condition requiring surgical interference exists, he employs this drug, and gradually pushes it to the full limit of tolerance, and in no instance out of some twenty cases has he failed to effect a cure. He directed that a boy, in a case which he describes, should drink no fluid after 6 P. M.; that at 9 P. M. he should take five drops of the following mixture in a tablespoonful of water (age of boy, fourteen years):

Liquoris atropinæ sulphatis.......	1 1-2 drachms
Liq. strychninæ hydrochlor..........	45 minims
Syrupi aurantii.....................	Ad 1 ounce

and that he should go to bed at 10 after emptying the bladder; that he should be waked to pass water at 12, when his parents went to bed, and again at 6, when the servants rose. This dose was to be continued for three nights; then 10 drops nightly for the next three, then 15 for the next three, and so on until 30 drops were taken. This dose was taken for a week, when enuresis occurred. The dose was increased by 5 drops every three nights till 60 drops were taken. This dose was continued for a week; no enuresis occurred, and the dose was diminished by 10 drops every three nights, until, after nine weeks, the treatment was discontinued. The enuresis, which had occurred two or three times a week since early childhood, never recurred. In this case the drug caused dryness of the throat, and dilated pupils, and paralyzed accommodation, so that he became unable to write.

In this case the maximal dose given was about one-ninth grain of sulphate of atropine, but in the case of a girl of seventeen he pushed the dosage up to one-quarter grain of the sulphate of atropine nightly, with ultimate success. In no instance were the secondary effects alarming in any way, or, indeed, more than slightly inconvenient. The addition of strychnine probably diminishes the depressing effect of large doses of atropine, and increases the sensitiveness of the vesical centers to reflexes from the bladder walls.

Rapid Treatment of Morphino-Mania.—At a recent meeting of the Paris Academy of Medicine, M. Laborde discussed the results obtained by Dr. Paul Soller at Paris from the Erlenmayer or "rapid" treatment of morphinomaniacs. The statistics adduced cover three years (1892–1894), and are very favorable for the system. It is claimed for it that it does away, on the one hand, with the chance of mortal accidents and the violent pains that accompany the "sudden" method, and that, on the other hand, it is invariably successful in weaning the patient from the mania, of which one is never certain with the "slow" treatment. Relapses are reduced to a fraction of their usual number, and the whole time required for the cure and convalescence does not exceed, on the average, two months. It seems indispensable for the success of the "rapid" method that the patient should pass a period of convalescence in a special establishment for the purpose, such as exists in Germany.

RETROSPECTIVE DIETETICS.

Artificial Foods in France.—At the Congress for the Protection of Children, sitting at Bordeaux, France, a resolution was adopted to the effect that artificial food should be forbidden in the case of infants under six months of age, that from six to twelve months of age the food should be milk with a little farinaceous material or the yolk of eggs, and that from one to two years the diet should consist of milk, eggs, mashed vegetables, tapioca and a little boiled fish. The feeding bottle with India rubber tubing was unanimously condemned.

Benefits of a Meat Diet.—In older countries (*Century*) the lower orders, as a rule, have but a low vitality. It may be truer to say that the vital volition is weak. Let the learned settle the definition. The fact is easily accounted for. During generations upon generations the majority of European agricultural populations lived upon vegetable food, like the majority of Eastern Asiatics, and with the same result. Hard labor produces hard muscles, but vegetable food yields a low vital tension, so to say. Soldiers know it well enough. The pale-faced city clerk who eats meat twice a day will outfight and outlast and outstarve the burly laborer, whose big thews and sinews are mostly compounded of potatoes, corn and water.

Ill-Temper a Symptom of Excessive Meat Eating.—According to Mrs. Ernest Hart ("Diet in Sickness and in Health," page 57): "One deplorable result of excessive meat eating in England is the ill-temper which is a chronic moral complaint among us. In no country, I believe, is home rendered so unhappy and life made so miserable by the ill-temper of those who are obliged to live together as in England. To everybody who reads these lines examples will occur of homes which are rendered quite unnecessarily unhappy, when they might be happy, by the moroseness and rudeness of the head of the family, by the peevishness of the wife, or by the quarreling of the younger members. If we compare domestic life and manners in England with those of other countries where meat does not form such an integral article of diet, a notable improvement will be remarked. In less meat-eating France urbanity is the rule of the home; in fish and rice-eating Japan harsh words are unknown, and an exquisite politeness to one another prevails even among children who play together in the street. In Japan I never heard rude, angry words spoken by any but Englishmen. I am strongly of the opinion that the ill-temper of the English is caused in a great measure by a too abundant meat dietary, combined with a sedentary life. The half-oxidized products of albumen form urates and uric acid, which, circulating in the blood, produce both mental and moral disturbances."

Treatment of Asthma by a Strict Milk Diet.—Huchard (*Sem. Méd.*) reports a number of successes in the treatment of cases, wrongly called neuropathic or reflex asthma, by the use of a strict milk diet. He has found the same regimen of great benefit in cardiac cases with nocturnal paroxysms of dyspnœa. He considers the dyspnœa in these cases to be due to ptomaines that find their way into the sluggish circulation and poorly oxygenated blood from the alimentary canal. He has found it only necessary to interrupt the strict milk regimen and resume a mixed diet to cause the paroxysms to recur. He has found that the milk, about three litres per twenty-four hours, must not be all given during the day, but about a litre of it in the evening and one-half litre during the night. There is a question whether the same results may not be obtained by the use of intestinal antiseptics in such patients as are unable to bear the strict milk diet. Huchard seems to incline to the opinion that all nervous asthmas are of toxic origin, and due to ptomaines absorbed from the intestinal tract.

MISCELLANY.

—Count Mattei died April 7th, at Bologna.

—An ordinance is now posted in the street cars by the Board of Health, forbidding spitting on the floors.

—The death rate in London last year was 16 3 per 1.000 persons. In New York it was 19.6, and in Boston, 22.5.

—According to the *Medical Record*, tartar emetic is a positive oxytocic. It almost usurps the place of the forceps.

—The income of Guy's Hospital has so far depreciated the past year as to necessitate the closing of some of the wards.

—A very rare case of temporary amblyopia from the use of chocolate, is reported by Dr. Casey A. Wood, in the *Medical Record*.

—Dr. W. H. Pierson treats epilepsy "with marked relief" with drop doses of fluid extract of tansy, on sugar, four times a day.

—To cut short an attack of asthma, spray the back of the patient with chloride of methyl, from above downward, and from below upward.

—A. S. Barling, M. R. C. S. (*Birmingham Med. Jour.*, No. 1832), reports a case of undoubted syphilis cured by the use of anti-syphilitic serum.

—Jonathan Hutchinson, LL.D., F. R. C. S., says in reference to vaccination: "There is, in my opinion, no medical fact that stands on a securer foundation."

—The bill raising the medical course from three to four years is now a law. Those who have already entered college will be allowed to graduate under the old rules.

—If you find that the patient cannot open the mouth you may almost invariably exclude diphtheria, and suspect one of the inflammatory non-diphtheritic forms of angina.

—In true idiopathic chlorosis, where iron is ineffectual, sulphur will produce a marked amelioration. After using sulphur, iron can again be resorted to, and it becomes very beneficial.

—Tape worm is said to be best treated with 10 drop doses in water, three times each day, of a mixture consisting of hydriodate of potash, 36 grains; iodine, 12 grains, and water, 1 ounce.

—Dr. John B. Murphy, of Chicago, the inventor of Murphy's button, is probably making more money at the present time than any other surgeon in the world. He is said to have received $50,000 within three months for appendicitis alone.

—W. Rushton Parker, M.D., reports (*Brit. Med. Jour.* No. 1832) a case of cretinism cured by a year's use of thyroid extract, the average dose of which was 5 grains in tablet form, once daily. The child was one year old when the treatment began.

—It has been computed by the *Scientific American* that the death rate of the globe is 68 per minute, 97,790 per day, or 35,717,790 per year. The birth rate is 70 per minute, 100,800 per day, or 36,817,200 per year, reckoning the year to be 365 1-4 days in length.

—Recent experiences in the treatment of diphtheria having shown that coryza in a child is a very fertile field for the propagation of the Klebs-Lœffler bacillus, the City Board of Health, of Brooklyn, require all school children having coryza to be examined. Cultures are made from the secretions by the city bacteriologist.

—CICATRICES. According to the *Charlotte Medical Journal*, small, comparatively insignificant citatrices of the face, such as result from variola, pustula acne, etc., are sometimes made less conspicuous by the long continued ingestion of small doses of some refined oil, as castor or cottonseed oil. It should be given in from three to twelve drop doses three times a day.

—Professor V. Noorden says (*Med. Rec.*) he has discovered a new means of diagnosing diabetes in its very earliest stages, or even a hereditary tendency thereto. He gives the patient 100 grains of grape sugar, which in the normal subject has no effect, but in the incipient diabetic produces glycosuria. If this proves correct it will be most useful in gaining for the diabetic the earliest possible treatment.

—The tracheotomy-tube has found a new use in overcoming the insufficient breathing-capacity for race horses. Since the great horse Ormand was condemned as a roarer, attention has been called to the prevalence of this malady among thoroughbreds, and resort has been had to tracheotomy with admirable results. The statement is made that at the recent Manchester races in England three of the four best steeplechasers carried silver tubes in their windpipes.

—Although there are several factories in the vicinity of New York devoted to the preparation of horse-meat for food, it is comfortable to be reassured by the chemist to the Board of Health that not an ounce of it is sold in this city unless it be in the shape of sausage (*Med. News*). It is also stated by these authorities that the flesh of the horse is easily detected by the usual iodine test for starch, which it contains in contradistinction from all other butchers' meat.

—The essence of turpentine gives, when taken internally, an odor of violets to the urine. This fact, the *Medical Review* says, has been put to good account by a learned professor, who has for some time been in the habit of giving the essence of turpentine in ten-drop doses three times daily to persons afflicted with incontinence of urine. In a short time the disagreeable odor of the secretion is replaced by the characteristic fragrance of the violet, to the great satisfaction of those about the patient. The treatment can be continued without inconvenience for several weeks, and is only counter-indicated in gastric catarrh and nephritis.

—Dr. Scheele, a chemical expert, says that 90 per cent. of the beer brewed in New York would not come up to the test prescribed by the German Government, which is not a severe one, only insisting that pure beer shall be brewed, and fixing severe penalties for the production of any other kind. It is an open secret that American brewers do very much as they please, putting all sorts of illicit stuff in their concoctions. So far they have been able to ward off any troublesome litigation, but it is time that their product was subjected to a strict and uniform official supervision, as it is in Germany, France, Brazil and most other beer-consuming countries. It is a question of the public health and well being, though the brewers in general seem to regard it as one which ought to be considered only from the point of view of their own private interests.

—Heat is the most important factor in altering the character and amount of active principles in a drug preparation. Take, for example. digitalis infusion. M. Roger has shown (*Am. Journ. Pharm.*) that the toxicity of digitalis infusion is very notably diminished when the product of maceration is simply concentrated on a water bath, from 90 to 150 times the amount of the heated product being required to cause death, as compared with the cold water product. What is true of infusion of digitalis when heated is very probably true of other drug preparations. How the commercial tablets alleged to represent galenical preparations are made is known only in a general way; each manufacturer following his own working details. We have been informed, however, on good authority, of a practice pursued by one manufacturer in making of tablets of the so-called narcotic tinctures (*i. e.*, aconite, belladonna, digitalis, etc). which, if true, is open to the severest censure. This manufacturer, finding that his tablets of these tinctures stuck together on keeping in stock, adopted a new procedure. Instead of making the tablets contain the tincture in minims, as represented, he makes a fluid extract of the drug, evaporates to a thick consistency, washes with petroleum benzine to remove resin, coloring matter and benzine soluble extractive, spreads on plates, dries with heat and makes up into tablets.

Egbert Guernsey M.D.

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TESTIMONIAL TO DR. EGBERT GUERNSEY, IN COMMEMORATION OF HIS SEMI-CENTENNIAL IN THE PRACTICE OF MEDICINE.

THE present year being the Fiftieth Anniversary of Dr. Guernsey's graduation in medicine, the Medical Board and the Alumni Association of the Metropolitan Hospital and other friends, celebrated the event by a complimentary dinner at the Union League Club on May 27th. Covers were laid for sixty-four, and the beautiful banquet room with the profusion of flowers presented an exquisite appearance, and one to be remembered.

Hanging upon the wall was a superb portrait of the guest of honor, by the eminent artists, Mr. and Mrs. McCloskey, which was the admiration of all.

Dr. Alfred K. Hills, Chairman of the Committee, presided on the occasion, and acted as toastmaster.

The following was the

MENU.

Clams.
Graves, 1878.
Clear green turtle soup.
Amontillado.
Filets of bass à l'Union League.
Potatoes Sara.
Rack of Spring lamb, mint sauce.
New potatoes château. Fresh string beans.
St. Estephe.
Sweetbreads larded, with spinach.
Asparagus à la Hollandaise.
Sherbet en surprise.
Golden plover with cresses.
Lettuce Salad.
Fancy ice cream.
Strawberries. Assorted cakes.
Bonbons. Fruits.
Apollinaris.
Coffee.
Union League Club. *May 27, 1896.*

The postprandial exercises lasted well into the small hours, and were greatly enjoyed by all.

TOASTS.

1. Dr. Guernsey.

ADDRESS BY DR. ALFRED K. HILLS.

Fellows of the Medical Board and of the Alumni Association of the Metropolitan Hospital, and Friends:

It is a time-honored custom with our German neighbors to celebrate the jubilee of their more esteemed colleagues in some manner by which they can show their love and veneration in an appropriate way and give vent to such sentiments as they may feel.

Your Committee of Arrangements felt that no more fitting occasion for the expression of our common feelings toward our respected guest could be found than around this board of feasting and good cheer.

No more proper place to commemorate this occasion could be found than in this noble club, of which our guest of honor was one of the founders many years ago, when our beloved country was in need of such service as it could give, and where the Metropolitan Hospital was conceived. I think you will agree with me that, under the circumstances, this is the place where the festivities of this gracious occasion should be celebrated.

It has been my privilege to know the man I am proud to call friend, for many years, and most intimately too. I have seen him under various circumstances, in joy, in sorrow, in success, and in the time which tries men's souls, but no matter what the conditions or environment, the sweet, tender, child-like nature would assert its trustfulness, with that unbounded confidence that all would eventually come out right.

It was nigh onto the wee small hours when my bell rang one night, nearly twenty-two years ago, and I was surprised by a visit from Dr. Guernsey, whom at that time I had known but slightly. He came to tell me of his interview with Dr. W. H. White, and the then President of the Department of Charities and Correction. The interview took place in this club, and it resulted in the organization of our beloved institution—the Metropolitan Hospital. The details of the acquirement, of the vicissitudes through which we had to pass, the rough paths which we had to tread and the difficulties to encounter before our work was accomplished, are too long and tedious for such an occasion as this, but I want to emphasize the fact that no matter what the obstacle that was met with, Dr. Guernsey was always ready and willing to help overcome it, not only by his great individual effort, but by his immense personal influence. The standing of our institution in the department of which it is a component, has been maintained and is to-day largely dependent upon the strong, sterling character of Dr. Guernsey, who has from the beginning been justly recognized as the tower of strength upon which it stands.

It was quite natural that the prime movers in this hospital enterprise should unite upon such a man, one full of energy, magnetism and experience, as an executive officer, and Dr. Guernsey was elected President of its medical board, September 5, 1875, and has been re-elected to this position each succeeding year.

Your humble servant, who has occupied the office of scribe during these years, is in a position to say that, during all this time, there has never been the slightest friction in the work of this board, largely because of the gracious suavity and just decisions of its presiding officer.

But, gentlemen, our own institution is not the only one that Dr. Guernsey has been deeply interested in during these years, for he founded the Western Dispensary, which has now become the "Guernsey Maternity," he was active in the organization of Hahnemann Hospital, for many years he served as a trustee of the Middletown Asylum, for some time he was a director of St. John's Guild, and he has been interested in numerous other works of charity, all of which goes to show that our worthy guest has been constantly following the foot-steps of the Master in doing good. What is more, he has not been a mere figurehead in any of this charity work; he has been an active helpful *worker*, ever ready with his hand and purse to do more than his share of the work to be accomplished.

My editorial connection with Dr. Guernsey, in the journal which he founded, has been of an ideal character. I have always found him ready and willing with his mind and pen to fill any gaps that might suddenly occur. I need not say in this presence that he is thoroughly abreast the times, for you all know it; but I must be allowed to assert that his pen is as trenchant to-day as it ever was, his intellect just as brilliant, and his enthusiasm in the work all that could be desired.

From the standpoint of the layman, Bret Harte truly voices the general sentiment, when he says of his friend and physician, Dr. Guernsey, that he is "a man of broad culture and broader experience; a man who has devoted a greater part of his life to the alleviation of sorrow and suffering; a man who lives up to the vows of a noble profession; a man who has locked in his honorable breast the secrets of a hundred families; whose face is kindly, whose touch is as gentle as the dying Narcissa; a man who through long contact with suffering, has acquired a universal tenderness and breadth of kindly philosophy; a man who, day or night, is at the beck and call of anguish; a man who never asks the creed, belief, moral or worldly standing of the sufferer, or even his ability to pay; in brief, a man who so nearly lives up to the example of the great Master that it seems strange I am writing of him as a doctor of medicine, and not of divinity."

To our revered and beloved colleague, Egbert Guernsey, who, having received the degree of Doctor of Medicine from the University of New York, March 9, 1846, this day, by divine favor, witnessing the fiftieth anniversary of that occasion, we, the members of the Medical Board and of the Alumni Association of the Metropolitan Hospital of New York, and other friends, offer our affectionate congratulations and good wishes.

To his splendid intellectual ability, untiring industry, broad culture and liberal spirit, progressive medicine preeminently owes her firm establishment and vigorous growth in this country. The period for his jubilee finds him still occupied, in the same spirit, in labors for the same end. In reviewing the fifty years of his professional work, we recognize with admiration his labors in the broad field of science, his unselfish devotion to the advancement of the art of healing, his generous demeanor toward his fellow workers, and his faithful and arduous services to the hospital of whose medical board he has been the president since its establishment.

May a kind Providence long spare him to a profession which he honors, and to colleagues in whose hearts he is cherished, and with our best wishes let us unitedly appeal for his happiness and for his continued health.

Now, my dear friend, I trust that anything I may do or say at this time will not influence you or prejudice us in any respect as to soundness upon one of the great questions of the day.

You may say, and I would not blame you if you did, that this is no place in which to bring up the "silver question," but notwithstanding the general feeling on this subject I am going to ask you to accept this piece of silver which has been modeled into this beautiful "loving cup," as a slight token of respect and esteem of some of your loving friends. Let us hope that it may ever be full to the brim.

The cup bore the following inscription:

To
EGBERT GUERNSEY, M.D.,
In Commemoration of His Semi-Centennial in the
PRACTICE OF MEDICINE.
Presented by the
MEDICAL BOARD
and the
ALUMNI ASSOCIATION
of the
Metropolitan Hospital, New York, and Other Medical
Friends.
1846. 1896.

DR. GUERNSEY'S RESPONSE.

The gift of this loving cup, a poem, exquisite in grace and beauty, wrought out through the highest skill of the artist from one of the most precious metals, is a surprise so complete, so overwhelming, that I have no fitting words to express my thanks. Most precious of all is the loving, generous thought which dictated the act; ever brighter than the shining silver; sweeter, more fragrant than the sparkling wine with which it may be filled. I need not say I have nothing more precious to transmit to my family, nothing around which will cluster more tender memories than the precious loving cup.

It is not necessary for me to repeat the invocation of my old friend, Mrs. Paul Akers: "Backward, turn backward, oh time in thy flight; make me a boy again just for to-night," for as I stand here surrounded by the kindly faces of men who have left the impress of their energy and thought through revolving years upon the records of our profession, and have listened to the eloquent words of my old friend Dr. Hills, as with delicate hand he has unrolled the curtain of the past, and touched with an artist's skill the salient points of a life history, I no longer feel a gray haired man, with face furrowed by the deep lines of age, but am standing in the freshness, the enthusiasm of youth upon the threshold of a profession in which the chief actors seemed to my inexperienced eye like demigods, with the magic power of unfolding the secrets of nature and changing a world of suffering into one of brightness and happiness. How bright the vision! How full the coming years seemed with earnest work and glorious triumphs!

I am again standing in the operating room of my preceptor and revered master, Valentine Mott. How clearly is that commanding form evolved from the memory of the past! The same calm dignity, the same thoughtful brow, the same massive head—equalled only in modern history by Edmund Burke and Daniel Webster. The patient is stretched upon the table; the assistants and nurses are grouped around—every eye fixed upon the master! The stillness of death reigns through the room, for no one dares speak when Valentine Mott holds the knife. Outside, he is simply a man; but here, where life and death hang upon the delicacy of his touch and the quickness and clearness of his judgment, he is *supreme*. Even the patient seems hypnotized by the eye and the magic touch of the master, for we have not yet reached that great boon to humanity, anæsthesia, which has disarmed the knife of half its terrors. There were no false steps, no hesitancy, but the operation moved on from beginning to end with a grace, a beauty, a precision and intelligence unsurpassed. Valantine Mott was at that time at the zenth of his fame, with a wider and more exalted reputation among the great surgeons of Europe, where he had lived for several years, than at home. In his reminiscences of travel he describes his visit to the tomb of Esculapius, where after ligating the carotid artery of a cock he sacrificed it to the memory of the god of medicine, delivering a short discourse to his companions on the triumph of modern surgery.

The triumphs of modern surgery! To look back through the vista of fifty years to the work which then made men immortal is like comparing the post horses and the swift courier messengers of those days to the click of the telegraph sounder of the present day as it starts a message on a 27,000-mile journey to return in thirty minutes. As we fill up the picture of fifty years' evolution of thought and progress, we catch the key-note of the triumphs of the present sounding as clear and distinct now as when uttered by Mott in his lecture room: "True surgery is built not upon mountains of dismembered limbs, but on the limbs to which we can point as having saved," and the closing words of the grand oldman, as his spirit was passing from mortal to immortal life, "*Order, truth, punctuality.*" Not alone in surgery, but in every department of our profession the past fifty years has been marked by an evolution unparalleled in the world's history. During those years it has made greater advances than in fifty centuries before. The slow evolution of the past was necessary to that of the present. The school-house was the nucleus of the future college, and the college a center, attracting the thought, the evolution, the progress of the world, sending out its rich currents of life everywhere to bless and to heal. The University of the City of New York was founded fifty-five years ago. Its first lectures were in a granite building on Broadway, opposite Bond street. I was a member of its fourth class, which numbered over 300. The teaching was almost entirely didactic, there being but one clinic a week and that held by Dr. Mott. The New York Hospital, the only large hospital in the city excepting Bellevue and Charity Hospital, occupied a double block on Broadway at the head of Pearl street, extending back to Church.

One of the attending physicians was Dr. Sweat. From him we learned the principles of percussion and auscultation which had recently been introduced into the French school by Laenec. His work on diseases of the chest, long out of print, was one of the best in point of diagnosis ever issued from the medical press. With him, as with many of the German and Vienna pathologists, treatment was a matter of slight consideration, his great pride being in the correctness of his diagnosis. I have often heard him say as he paused for a moment by the bed of some poor sufferer: "Gentleman, there is nothing here to detain us, we will confirm our diagnosis to-morrow," meaning that then the knife would tell the true story in the dead house. The only eye dispensary in the city where students could receive clinical instruction was a small one in Howard street, where Drs. Du Bois and Wilkes officiated. Dr. Horace Green had just commenced his specialty of disease of the throat, the treatment being mostly either with the knife or the application of nitrate of silver with the probang. And so the profession moved on as it had done for centuries, gaining little by little each year, each year recording some new fact, giving birth to some new thoughts to be utilized when a master mind should gather them together and crystallize them into some tangible form for practical use. Truth does not spring, like the fabled Minerva, full formed from the brain of Jove, but is the work of evolution, solving often with weary and painful slowness each link in the problem. The oft repeated phrase of the "Dark Ages" is simply a poetic license. There never has been a dark age. During all those centuries when brute force seemed to be the master, the great problems of life were being worked out by observing minds in the quiet monasteries of mountain fastnesses, away from the fierce surges of war and the bloody sway of animal passions. Paraselsus, with his higher spiritual philosophy, which saw God in every living being and in every atom of life, uttered not his own thoughts only, but in a more complete form those of hundreds of minds, who had communed with Nature during the centuries which preceded him. The so-called philosophy of Hahnemann was but an amplification, a crystalization, if I may so call it, of the highest thoughts of the centuries in therapeutics, in the crucible of his own mind, into a living system. That system was not simply the study of drugs from a single standpoint, or their administration in obedience to a fixed law. That which most aroused the antagonism of the medical profession was only a small part of his system. He looked not only to the dual nature of drugs, but to the dual nature of man in his spiritual and material life, and sought to bring the diseased and tortured body back to health by placing it under the influence and control of its harmonious laws. Under this new philosophy drugs were simply helps to Nature in the process of cure, not always needed, however, when Nature was permitted to have full sway. And here was brought into full play those laws of hygiene, of antisepsis, the individualization of cases and conditions which made the triumphs of the last fifty years possible. It pointed out the causes of disease in impure air, in lack of cleanliness, in improper food, in water saturated with poison, and demanded attention, first of all to these factors, looking upon the carefully selected drug as a matter for later consideration. This line of thought was in direct harmony and suggestive of those later investigations in germ life and bacteriology, in isolating the vital principle of remedial agents by the chemist, and adapting the various forms of food to their specific use. Hahnemann was in our profession the herald of Nature and his plea for Nature rung out so clear, so full of life, that whatever may have been thought of his dogma of drug action, the notes were caught up by thoughtful minds throughout the world. It is a question if the startling success which followed the immediate introduction of the new philosophy into this city was not due more to the cutting off excessive drugging and a strict observance of those hygienic laws which formed so important a part of the new treatment than to the use of drugs, however important they may be in certain conditions. The physician looked with the utmost care to the surroundings of the patient, without which the most carefully selected drugs would have proved of but little use. The trained nurse followed as a matter of course, and the fact may be an interesting one in this connection that the first charter granted by the State for a training school was obtained by my old friend and pupil, Dr. Alfred E. Sumner, the founder of the Cumberland Street Hospital, for the Brooklyn Maternity. The influx of light into our profession during the past fifty years has placed us upon a higher plane than in those days when the Kappa Lambda Society sought to crush such men as Valentine Mott, John W. Francis, David Hossack, Wright Post and Samuel L. Mitchell, names which the world will not willingly let die. How distinctly I recall an incident in the office of Dr. Mott, which showed how even he dared not act out his true nature. I was preparing the table for an operation and could not help but listen to the conversation of our old friend, Dr. Wilson and Dr. Mott, who were warm personal friends

"I would like to meet you, Wilson," said Dr. Mott, "but I dare not." Upon the impulse of the moment I said, in a tone of surprise: "Valentine Mott dare not?" A sad smile came over the face of the old man as he said: "No, my boy, not even Valentine Mott dare excite the wrath of a large portion of the profession."

When at a later day I, too, became charmed with the new faith—new, but old, for it was faith in Nature's laws—and joined the little band of earnest men in their studies and their work, nothing cut so deeply as the loss of professional companionship, feeling that we were to a certain extent standing almost alone—outcasts from the great body of the profession. I will not dwell upon these days of struggling, of unceasing work, of loneliness, of which a fast fading memory only exists. The new school was simply a step in advance of the great body of the profession, it was the herald of that coming day in which, science in its unfolding of the laws of Nature, pointed with unerring finger to conclusions and results reached only by the careful analyses of well-established facts as a basis for at least professional respect, and a union of forces working along similar lines for the good of humanity.

In this work of progress the Metropolitan Hospital has had full share. I need not refer to the organization of the hospital. That has been graphically narrated by one of the foremost leaders in the work, whose wise counsels and earnest work have done so much for the success of the hospital. But I may be pardoned if I speak in terms of pride of an institution which has done so much, not alone for humanity, but for advanced medical thought throughout the world. It has been not alone a hospital relieving the suffering, but a great post graduate school, each alumnus as he leaves its wards for the active work of his profession a center of advanced thought, of brilliant work, of scientific accuracy which has crowned their efforts with enduring success. The seed sown in that hospital is ripening in a rich harvest in the great field of intelligent labor. As authors, as specialists and in every department of our profession I do not recall a single one of the large number of physicians who have formed a part of our hospital staff who has not met with merited success. If it has been a privilege to live and work during the past fifty years, how much greater the privilege of forming a part of the great army of workers during any portion of the fifty years to come. The progress in the future, judging from the past two decades, a progress in which you will form a part, will be beyond the wildest dreams of the imagination. The great field is ripe for the harvest, and the laborers ready and eager for the work.

2. The Department of Charities.

The City of New York is most fortunate in having as the representative of its vast charities, a Board always alive to the interests of the people, and always active and painstaking in carrying out its noble work.

We have with us on this occasion one of the Commissioners of this great department, and I have the pleasure of introducing that veteran in charity work, Gen. James R. O'Beirne.

[Gen. O'Beirne made a most enjoyable and felicitous response, in which he expressed the greatest confidence in the management of the Metropolitan Hospital, and offered his warmest congratulations to the guest of the evening. We had expected to publish this address in full, but up to the hour of going to press it has not been received.]

3. The Regents of the University of the State of New York. The names of illustrious men are the eulogies of those who bear them and the inspiration of those who follow.

We all know that the University of the State is the leader and guardian of the great educational interests of the commonwealth. That its watchful care and wise forethought are seen everywhere in our institutions of learning, from the school-house to the hospital wards. It may not be known, however, that the State is indebted, more than to any one else, for the laws enacted within the past few years, and which have done so much to protect this community from irresponsible men and elevate the standard of medical education, to Regent Watson, whom I now have the pleasure of introducing.

RESPONSE OF DR. W. H. WATSON.

The University of the State of New York owes its origin to the disinterested labors of some of the most honored citizens of the Commonwealth—men renowned in public service, and whose lives have fully illustrated the dignity of the sentiment that *noblesse oblige*. Its first suggestion was due to Gov. George Clinton, a member of a family which has impressed itself upon the annals of the State more deeply than any other connected with its history.

At the close of the Revolution the whole system of education in this State was nearly defunct. Private schools were feeble and no public school system existed. In his first message to the Legislature Gov. Clinton used these memorable words: "Neglect of the education of youth is among the evils consequent upon war. Perhaps there is scarcely anything more worthy of your attention than the revival and management of seminaries of learning." In the first session after the war the Regents of the University were incorporated as the governing body of King's College—which was to be revived under the name of Columbia—and of such other colleges as the Regents might choose to establish. The original act was passed May 1, 1784. Three years later, on April 13, 1787, the Legislature authorized a revision of the law. Ezra L'Hommedieu, a graduate of Yale, and Alexander Hamilton were members of the Committee on Revision, and Hamilton's pre-eminently creative mind was probably its controlling spirit. The act, as then amended, in its chief provisions, is now the organic law of the University. It is a supervisory and administrative, but not a teaching, institution. It is a State Department, and at the same time a federation of 627 teaching institutions of higher and secondary education. The Regents are elected by the Legislature, in the same manner as United States Senators, and their term of office is for life. It is a purely honorary position without pecuniary compensation of any kind, and as such has commmanded the services of men of the highest character in the State. Among the earlier Regents we find the names of Alexander Hamilton, George Clinton, John Jay, Philip Schuyler, Baron Von Steuben, DeWitt Clinton, Henry Brockholst Livingston, Daniel D. Tompkins, James Kent, James Duane, John H. and Edward P. Livingston, Gulian C. Verplanck, Martin Van Buren, Washington Irving, William C. Bryant and William L. Marcy. In the language of George William Curtis, "the highest tribute to the Board of Regents is the truth that although every member is necessarily elected by a party vote, yet at the door of their council chamber party vanishes and politics disappear." All its deliberations are conducted in the spirit of the Virgilian motto: *Tros, Tyriusque mihi nullo discrimine agetur*. It is a great department of the State, from which all political, personal and sectarian influences have been entirely eliminated. The speaker believes that every case which has arisen in the course of the fourteen years during which he has been a member and a regular attendant upon the meetings of the Board of Regents has been decided solely upon its merits. I think, Mr. President, that the medical profession in this State may consider itself particularly fortunate in having a central educational and administrative body, which is at the same time an impartial court (the exact analogue of which exists in no other State), to pass upon the preliminary requirements for medical education, and to supervise and conduct the examinations for medical licenses to practice. The State of New York to-day stands in the very vanguard of medical education. It may be, I think, a subject for congratulation that the recent Constitutional Convention imbedded in the organic law of the State that department, largely due, if not entirely created by the unrivalled political genius of Alexander Hamilton, which, venerable with age, and now well advanced in the second century of its existence, is one of the very few institutions that remain unchanged amid the influences, which, in these later days, seek to reduce everything pure, noble and of good repute to debasing subjection to the fluctuations and uncertainties of party politics.

To whom, Mr. President, among medical men can the sentiment of the toast to which I have the honor of speaking, "that the names of illustrious men are the eulogies of those who bear them, and the inspiration of those who follow," be more fittingly applied than to the distinguished physician whom we are this evening assembled to honor?

Fifty years have passed since he was born into the medical world. During that long period what has been his character? How has he comported himself in all the relations which he has borne to the public and to society—as a man, a gentleman, an editor and author, and as a physician? What are the results of his labors upon the medical profession? Such are some of the questions that I would seek to answer.

A lineal descendant of an Earl of Huntington and a Duke of Newcastle, his American ancestor, John Guernsey, emigrated from the Island of Guernsey in 1638, and was one of the 180 Puritans who established the New Haven colony in that year. Educated at Phillips' Academy and at Yale, after a residence of one year in Europe he entered upon the study of medicine in the office of Valentine Mott, then the most distinguished surgeon of the United States, and was graduated at the Medical Department of the University of the City of New York in 1846. Possessing decided literary tastes, in the earlier years of his professional life he was at various times connected with the *New York Tribune*, the *Evening Mirror*, then edited by Geo. P. Morris and N. P. Willis, and in 1847 established the *Brooklyn Daily Times*, of which he became the editor-in-chief. He also wrote a school history of the United States, which was extensively used. Early in his professional life in New York he became a close student and earnest advocate of some leading principles of the new philosophy but recently introduced by Hahnemann. Believing, as did the celebrated Dr. Rush, that "the office of the physician is simply to be the handmaid of Nature," the system which sought in all the surroundings of the sick, and in all its medication, only to *aid* Nature, as herself the great physician, naturally appealed strongly to his sense of harmony and truth, and with the candor of a great mind he ardently turned to its thorough investigation, and becoming convinced of the truths which underlie the principles of the so-called Homœopathic School, he honestly and fearlessly decided upon its partial adoption in his practice. He gradually arrived at the views which he now holds, "that the Homœopathic School of the present is a liberal school, and that while its members look to the philosophy and teachings of Hahnemann as a guide in much of its therapeutic work, they yet utilize all of good, according to their judgment, which they find in the army of thinkers in the scientific world."

In the estimation of the speaker, the most important step in the career of Dr. Guernsey and the most far-reaching in its results, was the establishment of the NEW YORK MEDICAL TIMES in 1872, an independent medical journal, whose pages were open to a full and fair discussion of all matters pertaining to the profession. Of this he became the editor-in-chief. In this journal he has conscientiously supported the most liberal views in medicine. Regarding the so-called Homœopathic School as in fact the "Modern School of Rational and Liberal Medicine," and believing that the same lines of investigation are being more and more pursued by the intelligent and enlightened members of all schools, he has advocated the dropping of a sectarian designation which by no means covers all the teachings of the new school and which he believes to be an obstacle to its usefulness. This change he believes would "involve no surrender of principle, no abandonment of scientific, social or charitable organizations, no relinquishment of work which has been successful, but is urged with the utmost candor and with due respect for the convictions of others." It is needless to say that with these views of Dr. Guernsey the speaker is in full accord, and very much deplores the use of any sectarian designation of medical men. I believe, as does Dr. Guernsey, that they should all stand shoulder to shoulder as simply physicians, and that there should be entire liberty of opinion, of practice and of fraternization among all legally qualified physicians, and that the terms of admission to any medical society should be so broad as not to exclude any legally qualified physician on account of therapeutic belief.

Dr. Guernsey is pre-eminently one of those men whose "tall, heroic *manhood* the level dullness breaks." Of commanding presence, dignified and gracious bearing, he is at all times free from every suspicion of the vulgarity of hauteur, which so frequently accompanies *inferior* minds, and is always the genial and affable companion and friend.

All classes of his patients bear cordial and willing testimony to the purity of his motives, the unselfishness of his aims and the true nobility of his character. Devoted to the noblest of professions with an enthusiasm and love which have never known abatement, he feels that, as disease acknowledges no privileged exempts, neither does medicine admit the distinctions of pride or place when dispensing its benefits. In the words so fittingly applied to him by a distinguished writer: "His face was as kindly, his touch as gentle in the wards of the great hospitals as it was beside the lace curtains of the dying Narcissa."

Dr. Guernsey, descended from Puritans of noble blood, may well be defined as "The Puritan Gentleman." In all the positions which have been conferred upon him, whether as editor, author, professor in a medical college, Trustee of the Middletown Asylum, President of the Board of Trustees and Physician-in-Chief of the Metropolitan Hospital, or President of the State Society, the bodies which have appointed him have had abundant reason to feel highly honored by the recipient of their favors.

The results of his labors have been far-reaching, and they will continue to exert an incalculable influence in this and in other lands. That there is a growing liberality of sentiment and kindliness of feeling among all branches of the medical profession, and a palpable tendency to a coalition on some common platform no observing man can deny, and it is the belief of the speaker that to the writings of Dr. Guernsey more than to any other cause is this desirable result to be attributed. Differences now exist in name rather than in reality. Ere long bigotry and intolerance will be able to find no abode in the medical profession of this State. They certainly have no place in the realm of science.

4. The Medical Board. The main-spring upon which a well-regulated hospital must depend.

I will call upon Dr. C. L. Bagg, Vice-President of our Board, to respond.

RESPONSE OF DR. BAGG.

Members of the Medical Board of the Metropolitan Hospital and Other Friends:

We meet here to-night to celebrate the fiftieth anniversary of our friend, Dr. Egbert Guernsey, in the practice of medicine, and also to congratulate him on the half century in which he has labored so successfully.

While reading that beautiful and touching story by Ian McLaren, which I presume is familiar to you all, "The Doctor of the Old School," there was throughout it all one man constantly in my mind. His steadfastness of purpose, the gentleness of nature and kindness of heart, the skill in his chosen profession, acquired not alone from printed volumes, but drawn from the hidden mysteries of Nature by patient work and observation, the kindly advice and encouragement to those in distress; the broad influence for good in the community in which and for which he lived, all seemed fitting pages from the life history of our friend Dr. Guernsey.

Looking back over his fifty years of work, what marvelous changes he has seen. Etiological and pathological theories, that at that period seemed undisputed facts, have been overthrown. The surgical procedures are so advanced that the vital organs are explored or operated upon with almost perfect safety to the patient. Bacteriology, through the investigations of Pasteur, Koch and others, has proven that certain diseases are due to germ action, each individual germ upon entrance into the body producing in each instance its individual specific disease. Diseases are prevented or again cured by injection into the body of poisons resulting from germ growth. The knowledge and application of asepsis and antisepsis, that allows the modern surgeon to acquire such brilliant operative results; the last wonderful discovery in electricity, which enables one to see clearly photographed the bony framework, all would have seemed little less than miraculous to the graduating student of his day.

About the time of his entrance into the medical arena there came also from the other side of the Atlantic the new law of therapeutics advanced by one Samuel Hahnemann, who contended that the old law of contraria was fallacious and injurious to the sick, and the only true method of cure was by similars, or like curing like, he differing in that respect from Hippocrates, who said that certain diseases were to be treated by contraries, and again others by similars.

Grasping its facts, and with that broad spirit of investigation and liberalism that has ever dominated his character, he applied them practically, until becoming thoroughly convinced of their truths he abandoned the ranks of the old school and seized upon the banner of the new, and with it in his hands fought its battles until he saw it safely and firmly planted. Not back in the ranks did he serve, but always in the front, braving the heat of the battle, and by his courage and advice sustaining those about him.

Ostracized from social, scientific and medical societies, frowned down upon by the laity, the early pioneers of this philosophy, and he, foremost among them, fought a battle that required more moral courage than to face a contending army. Never daunted however, or fearing to acknowledge his convictions, he ceased not in his efforts until he saw the new school thoroughly and favorably recognized.

As the truths of the new school became practically demonstrated, adherents rapidly increased. men flocked to it from the old school; a college was opened for its teachings; but one thing was lacking, however, and that was facilities for its clinical demonstration, and efforts were frequently but ineffectually made to gain entrance into the large public hospitals, where its principles might be applied.

It was in this club, though not in this building, that the hospital which we to-night represent, and of which we one and all have just reason to be proud, had its conception, and its parent, if I may be permitted to use such an expression, was Dr. Guernsey. To him, probably more than to any one man, does the profession owe the fact that we control one of the largest charitable hospitals.

It was suggested to him in 1875, that if the tax paying friends of this cause would only recognize what an amount of money was yearly paid into the city's treasury for the maintenance of its charities, they might demand and probably would receive recognition in its medical departments. Papers were circulated among the friends and patients of the various physicians, and in three days' time four hundred million dollars of taxable property was represented, and probably double that amount would have been forthcoming if required.

Armed with this convincing proof, a petition was presented to the Commissioners of Charities and Correction by William Cullen Bryant and A. T. Stewart, and the Inebriate Asylum on Ward's Island was given them as a hospital.

A medical board was organized, and Dr. Guernsey was at once chosen as its chief executive officer. With the advance of years the hospital has steadily grown, and its work has increased until it is recognized as one of the great fields of clinical instruction. Among the members of our medical board who look after the welfare of those poor and needy patients entrusted to our hospital are skilled specialists in the various departments of medicine and surgery, as well as the general practioner. Operations of all magnitudes are daily performed, and the patients in the different medical wards receive the most modern methods of treatment.

The one hundred and sixty or more internes who have served during the accumulating years reflect the greatest credit on the Medical Board, as all have been generally successful, and many hold responsible positions in various public institutions throughout the land.

A training school for nurses also exists under the instruction of the board, and the general success of its graduates after their entry upon their vocation shows it to be second to none in the country.

It is with feelings of profoundest gratitude that I turn to our great chief, and acknowledge him to be the fountain head and power that has brought all this to that stage of development; so fruitful of good to ourselves and so full of honor to him. His life has been the exemplification of that noble precept: "To thine own self be true, and it must follow, as the night the day, thou canst not then be false to any man."

5. The House Staff. An able, efficient and faithful interne is an absolute essential to the well-being of a hospital.

The Medical Board of this hospital is fortunate in having in its number many ex-internes which are its bone and sinew.

I will call upon Dr. Bukk G. Carleton, President of the Alumni Association, to respond.

RESPONSE OF DR. CARLETON.

Mr. Chairman and Colleagues:

As alumni of the W. I. and Metropolitan Hospitals, we well understand how words fail to express that pleasure we all enjoy in being able to be present to pay homage to the eminent physician who has been President of our hospital since its organization.

His noble personality has always been a beacon light for every one of us. The broad and catholic spirit displayed in his practice and in daily duties of life, his love for his fellow physicians and generous feeling toward all; his untiring work and interest in the institutions with which he is connected, and more especially his fatherly care and solicitude for the large family of alumni which he has seen grow and prosper, cannot but engender sentiments of love, honor and respect.

As members of the various house staffs, we all remember how ever ready was the cheering word of encouragement as we journeyed onward over difficult roads of knowledge which he had traveled years before; how freely he gave from his years of experience and large storehouse of knowledge, those clear and valuable indications for the prevention of disease and cure of the cases presented for his consideration, which, in our battle with disease have always proved of untold value to our patients, and added many a laurel to our fame.

We have all wondered at his almost inexhaustible resources and brilliant mind, and can say that the alumni and the hospital have been truly blest.

Time does not allow us to dwell on the many characteristics that we all have learned to love.

Twenty-one years ago, Dr. Guernsey was unanimously chosen President of the Medical Board of our Hospital, and has never been found wanting. He has at all times carried the standard forward through disappointments and difficulties, but always triumphantly, and to-day this hospital is second to none in either branch, medical or surgical; with about 200 alumni at this date to follow his footsteps and to carry the banner onward, principally through the knowledge gained from his untiring efforts and teaching.

Members of this large family to-day are found in nearly all of the colleges, visiting staffs of the hospitals of the new school in this country—and are met with even abroad—and we may with pardonable pride point to them all as successful practitioners, and no one will ever deny that their success has been largely due to thorough, intelligent training and experience received in the hospitals over which he presided, and in which he is and ever has been the guiding spirit.

Many of the alumni are absent to-night, for professional or family reasons; but they are one and all present with us in the spirit, and are thankful that an opportunity has presented itself, whereby we might as alumni assist in the celebration of this, the fiftieth anniversary of the graduation of our illustrious Dr. Guernsey; and we believe that those who have passed over to the majority, join with us in wishing long life, health and perfect happiness to our esteemed colleague, friend and benefactor, Dr. Egbert Guernsey.

6. The Chief of Staff. The main spoke in the wheel which keeps a hospital running. He represents everybody in their absence, and is expected to do *everything*—executive, professional, mechanical, together with the farming, gardening, etc., etc., etc. He is the man-of-all-work, including the "Training School for Nurses."

The Metropolitan Hospital is fortunate in having a man in this position who can do all these things at the same time.

I need not introduce to you our genial Chief of Staff, because you all know him.

DR. STEWART'S RESPONSE.

There is always a time in a man's life when he wishes that he could put in words the sentiment of his heart. Such a time has come, and I am loath to attempt what eloquent speakers have testified to in such glowing tribute. I heartily endorse all that has been said in reference to our great and generous friend, and can add one more honor to his breast, and call him Father of the Chiefs of Staff, for to him of all others is due the crown, if there be such, of making a Chief of Staff, after he formed what to-day is one of the largest hospitals in the world.

This is a time for congratulation and rejoicing—not for the dry statistical statements I can make of the thousands of patients treated, of the nature of the operations performed, of the wonders of the autopsy, of the marvelously low death rate, marking our treatment as one to be proud of, or of the duties of the Chief of Staff. Still, it may be of interest to you to know that, under our magnificent President, the hospital has grown in six years from 4,100 to 7,400 patients treated, and that its death rate decreased nearly 1 per cent. during this period.

That since the foundation of the hospital in 1875 there have been six Chiefs of Staff. I can mention three of them, who are well known to you and to the profession at large—Dr. Selden H. Talcott, Superintendent of Middletown State Asylum; Dr. A. P. Williamson, Dean of the Minnesota Homœopathic Medical College, and Dr. T. M. Strong, Superintendent of the Massachusetts Homœopathic Hospital. Considering the positions these gentlemen now hold I feel as though I had some show.

In the administration of the affairs generally there are times when advice is needed on questions of importance. Such times have been of frequent occurrence during my six years in the hospital, and I have always found an earnest friend and strong adviser in Dr. Guernsey, who is ever ready to assist and uphold me by word and counsel. This advice has not been to me alone. There are other members of the house staff who have every reason to be thankful to him for his assistance, both in sickness and in health. Many times to my knowledge has he left his home to visit the sick doctor on the island, and the advice he has given to those graduated by the hospital has been invaluable. That this has been appreciated can be seen by the many letters recently received by me.

It is impossible to describe the position of the Chief of Staff of the Metropolitan Hospital. He is a regular Pooh-Bah, who is supposed to do everything to perfection, and see everything that other men do not do, and do not see. He is obliged to light all the vessels that pass through Hell Gate, cook the food, and cure the sick. At the same time he has to change his raiment whenever he visits the Training School for the female nurses, to be *en regle*.

Speaking of the Training School reminds me of our President, Dr. Guernsey, who for years worked to establish what to-day is an honor to our profession, and my pet scheme. This school started under most adverse circumstances, with but seven nurses; to-day it boasts of forty, with its home for graduates in this city, and a record of which it is proud. All this has been your work, my dear doctor, and all honor to you is here meted out.

To-day our wards are full to overflowing. Our visiting staff are men full of work and honors, our resident physicians are gentlemen of high intellect, and our nurses—nurses in the full acceptation of that term, nurses in the wards, gentle women in their homes.

During my six years as Chief of Staff the name of the hospital has been changed three times, and each time for the better, but one change was a startling one. I mean the move we made on March 26, 1894. Will I ever forget it? Never!

It is memorable—never can its memory be effaced. It was the first Monday after Easter Sunday, cold, bleak and dreary; but so excessively funny that I can see my 400 still marching down the hill from the Wards' Island Hospital, and trudging up from the boat to the old Blackwell's Island Insane Asylum, every one of them, the lame, the halt and the blind, carrying something, no matter whether it was a bed-pan or a bird cage, while I stood hatless, howling and yelling my directions to put such a one to bed when there were no beds. The insane officials had kindly left all the beds on the lawn. That night we slept as our friends were wont to sleep of yore, on boxes, in boxes, on the floor and on anything—but with all our moving we did not lose a patient, nor a meal. We were sorry to lose our old home, but I thank the gods that gave us so little foreknowledge of what we were to endure—but now all is changed—our homes and our wards are bright with cleanliness and cheer.

Thanks are due to those men who have so kindly interested themselves in our behalf, our Board of Commissioners, to whom too much credit cannot be given for the change they have made in a building nearly ruined by misuse, and which was so graphically described by Dickens as of the Past, in his "American Notes."

Before closing these remarks, I wish to thank you, Dr. Guernsey, for the advice and assistance you have given me, and for your many acts of kindness. That your great, big-hearted, useful life may be prolonged many years to enjoy the "loving-cup" is my earnest wish.

7. The lawyer and the physician are brought more closely in contact with the great heart of humanity, with all its yearnings, with all its secrets, with all its motives and with all its wants, than any other class of the community. They meet at the death-bed where a life's earnings are distributed, they meet in the court room in the sharp analysis and logical presentation of facts which turn the scales to the side of justice, and they meet, too, co-workers in all those great movements looking to the care of the poor and suffering and the protection and best interests of society.

I am most happy to be able to introduce to you this evening the Hon. William Van Namee, a fitting representative of the broad-minded liberality, the wisdom and the energy of the legal profession, more especially when directed to the great medical institutions of the State and the development of a higher education in every department of life.

RESPONSE OF MR. VAN NAMEE.

I have always esteemed it one of the choicest privileges, as it is one of the most precious memories of my life, that for nearly twenty years I was brought into close and constant relations with our honored guest in joint service upon the Board of Trustees of the State Homœopathic Hospital at Middletown. And since

> "I count myself in nothing else so happy
> As in a soul remembering my good friends,"

I feel that it is a most delightful sequel of that great privilege that I should be permitted to participate with you in this general tribute, and especially that I should be permitted to testify to the splendid qualities of mind and heart exhibited by our guest in that branch of his life work with which I am chiefly familiar.

Indeed, no review of his life work would be complete which failed to include his services to the noble institution to which I have referred. Dr. Guernsey entered upon his labors there during its formative period. He impressed upon it, in a marked degree, his views, his policy, his principles, as to the proper care and treatment of the insane. It was he who selected and brought to the executive management of the institution Dr. Selden H. Talcott, whose success has so amply justified his judgment and foresight. It is no disparagement of the services of others to say that to no one except Dr. Talcott and President Grinnell Burt is the profession and public as much indebted for this ideal, this model, this unapproached, this incomparable institution as to Dr. Guernsey, who gave to it for twenty years the best energies of his heart and brain.

I say his best energies advisedly. You, who did not see, cannot realize as I do the faithfulness, the devotion, the conscientiousness which characterized the performance of his duties. Some of us, I fear, performed our duties in a perfunctory and official way. Not so with him. His knowledge of every detail was minute, careful and exact to the last degree. Nothing escaped his most patient and jealous scrutiny. He grudged no amount of time or labor necessary to enable him to understand every need and to promote every interest of the institution. And his mind teemed with fruitful suggestion, with wise counsel, with profitable instruction.

Then, too, the language in which his views and suggestions were conveyed to us. He met many able men in that board whom he well remembers, not to mention those who are still living, but to mention only those who have passed away; there was Judge John G. Wilkin, a man of massive intellect and rugged force of character. There was Senator Daniel B. St. John (for whom your distinguished Dr. D. B. St. John Roosa is named), the most polished, the most courtly, the most captivating gentleman of his time. There was Congressman Moses D. Stivers, the most forcible and ready editorial writer of Eastern New York. There was Hon. James G. Graham, whose wit, imagination and sentiment held us all spellbound and entranced.

But in all this gathering of brilliant intellects there was no English spoken as pure, as correct, as exquisite, as faultless, as felicitous as that which fell from the lips of our distinguished guest. Often have I sat in wondering admiration at the art which could clothe thoughts so practical in language so poetical; which could invest common things with a new meaning and a higher interest; which could transform the sordid things of life into images of beauty, of hope, of consecration and of humanity. He embellished every theme that he touched; he dignified every subject which he discussed; he uplifted every debate to a loftier plane.

It is this rare and fine accomplishment which has enabled him to lay so many interests under obligation to him. To-night we honor him not merely as a distinguished physician who has completed a half century of honorable devotion to his profession, but as the broad philanthropist whose generous heart is open to all the claims of our common humanity; as the commanding orator whose words have touched the hearts and awakened the consciences of men; as the exquisite writer whose teeming pages have influenced far and wide the thought of his time. When to all this you add the contemplation of all those social graces and accomplishments which have made him the most charming of companions, where will you turn for a figure, a personality more unique, more interesting, more attractive? Long may it be spared, in all its manly dignity and beauty, a blessing to us, to its kindred, to mankind.

8. The Empire State. Always foremost in its great works of charity and in every effort to elevate the people.

I will call upon Gen. Howard Carroll to respond.

9. There is a rumor in the air that the Surgeon-General of this State is something more than a figurehead, and that he has infused into the Medical Department of the National Guard the energy, the order and the discipline which has always characterized his work in other walks in life.

DR. TERRY'S REMARKS.

The occasion is solely for the purpose of honoring a member of the medical profession, whose principles are humanity regardless of school. I, therefore, do not care to side-track the motive which has brought together a body of men which may well be considered a compliment to him who has for so long a time deserved the recognition of his invaluable services to the medical profession. I will simply say I am endeavoring to do my duty for the medical department of the Guard, and if my achievements please the members and my friends I shall be satisfied.

The name of Dr. Egbert Guernsey, of this great metropolis, is equally known throughout this entire country for his "domestic" practice, is as familiar to those families who have employed Homœopathy as is the New Testament. This work has crossed the Atlantic Ocean, has taken root in a foreign country, and has been translated into many tongues.

The name of Guernsey is synonymous with strength and solidity. His brain was constructed on true architectural principles, for we find he began his education at Phillips Academy, that he was taught in medicine not only in all that pertains to the dominant school, and practiced in it for many years, but like the philosopher that he is, always moving forward, and therefore in his march of progress he not only investigated the new school, but has for many years adopted the underlying principles of it.

I have studied this grand old man for more than twenty years. The early life of a newspaper man—a reporter and an editor—does not seem to have hardened his heart, for he has the tender sensibilities of the tender mother, mixed in grand contrast with an independent courage and logical conviction on all subjects, and is ever ready to defend them, regardless of the quality of brain or number of those thinking otherwise than himself.

He was once an honored militiaman of this State, and shows the true soldier he would have made in the hour of peril, for he is brave, true and self-sacrificing.

The climax of his ripe career and the summing up of his mature judgment, shows his prejudices, if he ever had them, have melted away, for his creed in medicine, like his creed in religion, is liberal, generous, conciliatory and deferential, believing that there is good in everything, imperfections in all things, and therefore to do the greatest good to the greatest number his wisdom concedes the good in all, and his duty to humanity yields obedience to the acceptance of truth, come from what source it may.

10. The State of New Jersey is noted for many excellent things, but for nothing more than its genial, whole-souled doctors.

We have one of them with us to-night, and I know you will be glad to hear from our friend Dr. Mandeville, of Newark.

11. Our Medical Colleges. The source from which we draw our internes. May they always send us their banner men.

I take pleasure in calling upon Prof. Malcolm Leal for a response.

DR. LEAL'S RESPONSE.

I would like to add to the sentiment already expressed the following:

Our Medical Colleges: May the profession unite to support them; may the laity learn to appreciate its indebtedness to them; may all unite in furthering the interest of the students of medicine, regardless of personal antagonism or personal gain.

There are in this city two undergraduate medical schools. Both have striven against heavy odds for over thirty years to provide instruction for men and women who desire to practice medicine according to the principles formulated by Samuel Hahnemann.

Poverty, mismanagement and opposition have combined to obstruct their progress, yet withal, to-day they each maintain a standard even higher than the law demands.

This spring they have made radical changes in management. Governing faculties have been abolished, or rather have been so enlarged as to include all professors. Whether this is wise remains to be seen, but I believe it to be an important factor in harmonizing the work of the various departments.

Another action taken by both faculties I believe to be of even greater advantage to all Homœopathic institutions; that is, the provision of time for their students to attend your clinics at the Metropolitan Hospital.

I believe that the time has come when the colleges and hospitals will work together for the common cause—the education of the physician.

Reverting to the sentiment, "May they send us their best students," just let me remind you, Mr. Chairman, that there are women in medicine, and that the time must come when your staff must admit women to examinations for places as internes.

It is to me a valued privilege to be here this evening to celebrate the anniversary of one whom I have known and admired since I was a student in one of our colleges.

And my pleasure is enhanced by the fact that I have been a constant dweller in what was the camp of the enemy. I say, "What *was*," for I believe that *no such camp now exists.*

So I wish to add to my personal congratulations to Dr. Guernsey the congratulations of our medical colleges.

12. The Medical Press. The beacon light of the profession.

Responded to by Dr. E. H. Porter.

REMARKS OF DR. JAS. A. CARMICHAEL.

I esteem it a great privilege to take part in the expressions of high respect and affection that have been so generously extended to my old and dear friend, Dr. Guernsey, here this evening. When a good man dies, the world feels itself enriched in that he has lived, and all the more so when he still lives and still bestows the ministrations of his goodness for the benefit of his fellow man. When I use the term good man it is not with the interpretation that is so often given by the world to indicate the man who is so called because he is to all appearances a faithful and zealous churchman, for example, and duly performs all the functions and observances appertaining thereto, so that he is often named as a pillar of the church. Far be it from me to depreciate the services and ordinances and everything belonging to religious requirement that the Christian world has adopted as the medium of communication between man and his Maker; but we are so often called upon to witness the unfaithfulness of the good man and see the pillar of the church give way and the whole superstructure of reputation, good name and all that makes life worthy and of good repute topple and fall in one tremendous crash of ruin and irremediable chaos. He has "worn the livery of heaven to serve the devil in," and the open door of a prison is his last refuge. But, happily, we can point to our guest of this evening, whom we delight to honor, and say that he wears the mantle of benevolence and charity to serve the beneficent uses of humanity. The bestowal of charity by your Peabody, your Baron Hirsch, and many others noted in the world of philanthropy, and the dissemination of substantial good is very admirable in its way, and, no doubt, diffusive of vast and far-reaching benefit to suffering humanity. But these men gave of their superabundance. They breathed gold; they sweated gold; they swam in a Pactolian stream of gold. Monuments have been and are being erected to their memory, and the world will give them an apotheosis commemorative of their generous contributions to the needs of man. How is it with the physician? He may not be invested with such wordly goods as these. He may not be able to bestow great wealth, and leave it behind him in perpetuity for the continuous amelioration of his kind, and for lifting the burthen from shoulders bowed down by the galling yoke of poverty and want. No, but he gives more than these; the inestimable boon of his professional knowledge and skill; and extends the humanities and sympathies of his art to soothe pain and sorrow, and, if need be, smooth the pillow for the departing spirit, and make easy the way to eternity. When such a man dies, he needs no monument, no ambitious mausoleum, for he can say, "Exegi monumentum perennius aere"—I have built a monument more lasting than brass, a monument in the hearts and affections of my people.

Much has been said here to-night of the devotion of Dr. Guernsey's life to charitable work, and to the erection and maintenance of institutions for the sick and suffering, and many of them have been signalized, and have received their due meed of recognition and approval. But my memory fails to recall that of them all, that one most worthy of admiration, and most conspicuously representative of the nobility of tender sympathy that characterizes Dr. Guernsey's nature, "The Guernsey Maternity," adjunct to the Hahnemann Hospital, had received its abundantly merited recognition, and was neglected when the tide of our love and respect was in full flow, and our hearts warmed by the genial glow elicited by the contemplation of his most excellent and honorable life. What does maternity signify? It means that most comprehensive word mater, mother. In her hour of travail and pain, woman most needs care and solicitude, and in view of the function of her maternity, becomes the most interesting object on earth. Here are willing hands held out to her, and kindly voices say: "Come in, come in, and all will be well." The projection of a human being into the world, endowed with all the capacities for independent existence, makes of woman the most important factor and instrument in the maintenance of the world. No wonder that the old "Garde Napoleonne" stood uncovered when a pregnant woman passed along.

And now "honor to whom honor is due," compels the recognition of other hands and other hearts in the work of this great humanity. "Matre pulchra, filia pulchrior—" daughter more beautiful than the beautiful mother. Beautiful in the persistent, and unintermitting devotion of their lives to the same purposes of the alleviation of human suffering, and the same bestowal of sweet charity that makes of father, mother and daughter a trinity for the dispensation of good that "knows no change nor shadow of turning." We now extend the loving cup to Dr. Guernsey for his acceptance; when he quaffs from it the bright drops that float and mingle in its depths, and that will warm the cockles of his dear old heart, he will remember this night. Let him remember, too, that they are the reflex of the red globules that float and run through "the gates and alleys" of our hearts and bodies, and that animate us with love and sympathy, and make of this an occasion ever to be cherished and never to be forgotten.

Now join me in a parting sentiment and in the words of an Anacreontic familiar to you all:

"Fill your glassses, fill them high. Drink, all your bumpers, drink them dry." To the long life, health and happiness of Egbert Guernsey. God bless him forever.

REMARKS OF DR. W. M. L. FISKE.

As the only one here representing the "Old Williamsburg," where our distinguished guest commenced his literary and professional career, and as my acquaintance with him extends away back for nearly forty years, when I was a brown-haired, beardless youth, I feel that I can hardly let this opportunity pass without giving my testimony as to all that has been said of him here to-night. In your introduction, Mr. Chairman, you speak of the "child-like faith" of Dr. Guernsey that has marked his long and useful life in his profession, and as I was also one of the worshippers at the feet of his preceptor, the immortal Valentine Mott, and as I have sat with bated breath and seen him with one bold stroke with his glistening scalpel cut down to the axillary artery, showing the confidence in himself, so has his pupil, Dr. Guernsey, shown that "child-like faith," born of profound knowledge of his subject—and to the younger men gathered here this evening, to do honor to him who has rounded out a full fifty years of incessant toil in and out of his chosen profession, I would say cultivate that same "child-like faith" which he has always shown—that whatever he considered right and just to carry out, whatever he considered the true course for him to pursue, no manner of opposition, no amount of vituperation, no mountains of discouragement, no valleys of despond, have ever swerved him one iota from his course, and for this I love and revere him, and for this I hold him up to you as a living example worthy of your every emulation.

The following letters were read:

BROOKLYN, April 30, 1896.

Dr. Alfred K. Hills, Chairman, etc.

DEAR DOCTOR: I have to regret my inability to be present on the interesting occasion of Dr. Guernsey's professional semi-centennial.

It is highly fitting to do honor to a man who is an honor to his calling. Dr. Guernsey has done much, apart from his profession, deserving of public recognition, while his services to the cause of medicine entitle him to exceptional consideration. If he has not made discoveries in the science and art of medicine, like a Hahnemann, or a Sims; if he has not invented new "cures" or new ways of applying old ones; if he has not discovered, with questionable utility, a new disease or a new microbe; if he has not written or compiled ponderous tomes to cumber the shelves of our libraries, or to find their way to second-hand book stores or the junk shop, like many of his distinguished confreres and contemporaries; or if he has not greatly added to the volume of knowledge from which the plodder draws his supply, he has done as well or better than the most distinguished among us who have done these things. He has stood bravely for the truth, leading a minority against error intrenched in high places; he has likewise been foremost in all good work, not only in medical reform, but in the care of the unfortunate and dependent, and of the sanitary well-being of the public. He has been pre-eminently open-minded and free from the bias of prejudice; generous and appreciative of other men's labors; receptive of new ideas and improved methods; alive to the newest and best thought of his day and generation, and has reflected it freely upon his fellow men. One can ill-afford lightly to esteem these high qualities.

No man of this last half century has done more to elevate and broaden the wing of the profession with which he has been identified than Egbert Guernsey. His entrance into the polemical arena of medicine was auspicious. The truths of Homœopathy had, indeed, been sown and had taken root, but they were being overrun and choked by a growth of noxious tares of error and misconception, needing a mind illumined and a purpose upright and resolute to deal with it. These high qualities Dr. Guernsey has brought to his task, with what result we all know. The profession is cleaner to-day, less partisan and self-seeking, broader-minded and altogether on a higher level, and medicine more rational and freer from isms and doctrinal absurdities, for the existence and labors of Egbert Guernsey. Let us hope that he may live long, and that increasing years may not dim his light nor belittle his influence.

Respectfully,
D. A. GORTON.

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56 WEST FORTY-EIGHTH STREET,
May 18, 1896.

Dear Dr. Hills:

Your kind invitation was duly received. I start for St. Barbara, Lower Cal., to-day—"the land of sunshine and flowers,"—for my summer vacation, and regret sincerely my inability to join others in a public expression of the love and appreciation which we all feel and cherish in private. We say: "Gladstone, the Grand Old Man," etc. We say, "Guernsey, the Grand Old Physician," of whom we are proud. In two notable occasions it has been my privilege to fight by his side. I refer to the Wards Island and Hahnemann Hospitals.

Here is to the health of the grand old doctor. May he live long to enjoy the honor of eminent distinction, honorably and honestly won.

Yours fraternally.
WM. HANDFORD WHITE.

The oldest physician in France, Dr. de Bossy, of Havre, celebrated, the other day, the 105th anniversary of his birth. Recently he has been confined to his room, for the first time in twenty-eight years. His father lived to be 108 years old, and the son says he expects to attain the same age. He is wonderfully well preserved, and is an entertaining companion.

KOLA IN COMBINATION WITH CEREAL PHOSPHATES.

By A. M. FERNANDEZ DE YBARRA, A. B., M. D.
NEW YORK.

Ex-Assistant Secretary-General of the First Pan-American Medical Congress.

KOLA is to-day a fashionable remedy. Its undoubted therapeutic qualities are being praised beyond measure, and as a natural consequence the market is full of unscientific and purely commercial preparations bearing the name of Kola, but designed merely as candidates for popular use without any prescription or endorsement, or even knowledge of the physician.

As it is the case with all vegetable medicinal products, the country from which Kola is imported, the soil upon which it grows, the manner it is cultivated, the age of the plant, the season of the year the fruit is gathered, and the way it is packed for transportation, all these are circumstances which greatly modify its therapeutic virtues, and should be taken into consideration. Besides, substitutions and mystifications of different kinds frequently occur.

Recognizing that to the considerable percentage of caffeine contained in the true West African Kola-nut is owed its stimulating effect upon the heart, the nerve centers, and the nervous system in general, and wishing to make that effect more lasting by improving the nutrition of that all-important part of our organism, summoned to do extra work, I have employed Kola in combination with cereal phosphates in the proportion of five grains of the latter for each fluid ounce of a scientifically made cordial of the former, representing 120 grains of Kola seed, the regular dose of which is a teaspoonful, and obtained with it very encouraging results. Used in this way, *kola pushes the patient ahead and the cereal phosphates keep him there.*

But this combination has yet another advantage. The phosphates, which so greatly assist assimilation, and are essential to the formation of bone, blood, and nervous tissue, seem to prevent the natural depressive reaction following the increased action of the heart produced by Kola. And here lies what I believe to be a great future for the happy association of those two important therapeutic agents.

The phosphorized constituents of nervous tissue are found in large quantities in the urine, in the form of phosphates, whenever great mental labor is going on, and the loss thus sustained must be promptly replaced in order to preserve the necessary equilibrium in our economy. The same thing may be said after active muscular exercise. In both cases the cereal phosphates come just in time to put the whole system in its normal state.

The phosphates excreted in most fevers are augmented to a considerable extent, and, as a general rule, the alkaline phosphates increase and diminish at the same time as the sulphates, thus seeming to have their origin in the retrograde metamorphosis of the proteids.

An increase in the total phosphates eliminated by the urine is also observed in acute inflammatory diseases of the nerve structures. In the acme of cholera, in acute atrophy of the liver (Buchard), in diabetes (Lecorché), in the early stages of phthisis, in chronic rheumatism, leukœmia, rachitis, and osteomalacia they are likewise increased.

These references to the loss of the phosphorized constituents of nervous tissue are sufficient to prove beyond all doubt the *rationale* of using such important reconstructive agents as cereal phosphates in combination with kola. But, nevertheless, I append a few clinical observations which will enhance, more than anything I could add, the practical value of employing a general stimulating tonic with a powerful tissue builder.

DESCRIPTION OF KOLA.

The vegetable African products known among the natives with the varying names of *Kola*, *gourou*, *ombiné*, *nangoné*, *kokkorokou*, *gonja*, *makasso*, *bichy*, etc., belong to different species of Sterculiaceæ, and are used by them as a masticatory, very much for the same purpose that we drink coffee and tea, and the natives of South America use coca, maté, and guarana. The general aspect of the true Kola tree, however, resembles that of the chestnut; it is from 30 to 60 feet high, having a cylindrical, straight stem with a grayish bark; the branches are pressed close together, being smooth, glossy, and hanging almost to the point of touching the ground; the leaves are oval, acuminated, alternate, from 7 to 8 centimeters in width and 12 to 20 in length, petiolate, coriaceous, and provided with very distinct nerves on the under surface; the flowers, which bloom twice a year, in June and November, are numerous, regular, without petal, polygamus, form panniculated cymes at their ends, have a light yellow color, and a faint odor of vanilla; the ovaries are five-lobed, five-celled, cohere together, each having a slender stigma, but no style; the fruit, which assumes a brownish-yellow color when ripe, is composed of two, sometimes more, separate pods or follicles, but always less than those of the cells of the ovary, and each of them is sessile, oblong, semi-ligneous, from 8 to 16 centimeters in length and 6 to 7 in width, split open on the inner side, and contain from five to ten oblong, subtetragonal seeds of a red or yellowish-white color, with testa somewhat purplish and cartilaginous, weighing from 75 grains to 1 ounce.

The natural habitat of *Kola accuminata* (Sterculia acuminata, Palisot-Beauvois), which is the therapeutically genuine tree, is on the western coast of Africa, between 10° N. Lat. and 5° S. Lat., and no further than about 500 miles toward the interior. It is now cultivated in the West Indies, principally Jamaica, in South America, Sidney, Ceylon, Calcutta, Cochin-China, the island of Mauritius, the Seychelles, Gabon, etc. It requires a moist, warm soil, not too far from the sea coast, and does not grow at an elevation of over 1,500 feet above the sea level. It commences to yield fruit about the fourth year, and is at its best about the tenth year. There are two collections of the fruit during a year, a tree averaging about 120 pounds of nuts annually, the seeds of which are the only part so far employed in medicine. The French call it *café du Soudan*.

The celebrated botanist Palisot-Beauvois, Dr. W. F. Daniell, Thomas Christy in his "New Commercial Plants and Drugs" (London, 1885), Heckel and Schlagdenhauffen, Professors Dujardin-Beaumetz and Germain See, G. Le Bon, and particularly Dr. Bernhard Schuchardt, in his recent exhaustive work entitled "Die Kola Nuss in ihrer commerciellen, kulturgeschichtlichen und medicinischen Bedeutung" (1892), and F. Flückiger in his "History of Kola" (1894) have given extremely interesting, historical, and scientific accounts of the Kola nut and its uses, and I refer the reader to them as perfectly reliable sources of information about the subject, as so much has been, and is now being written in relation to Kola that is absolutely worthless.

Regarding the great esteem and even superstitious veneration with which the negro tribes of equatorial Africa hold their guru-nut, be it sufficient for me to state here that the seeds of this nut have from time immemorial (the Portuguese traveler, López Duarte, wrote about them as early as 1590) been held in the interior of Africa as worth their weight in gold dust for their virtue to appease hunger when masticated, to dispel the insipid taste of stagnated water, which sometimes they are obliged to drink in their trampings in the jungles, their general stimulating power, by means of which the body acquires a high degree of strength and considerable endurance, and also for their exhilarating and aphrodisiac properties.

CHEMICAL COMPOSITION OF KOLA.

Daniell and Attfield, in England, Heckel and Schlagdenhauffen, in France, and Schuchardt and Flückiger, in Germany, have made very careful studies of the chemical composition of the true Kola nut, though their analyses do not agree in every particular, owing, most likely, as I stated in the introductory remarks, to differences in the soils upon which the samples tested grew, the age of the trees, the manner of packing the nuts, and the time elapsed since their gathering in the fields. Starch, very similar in character to potato starch, constitutes 33.75 per cent. of Kola seed; caffeine, 2.35; kolanin, 1.29; theobromine, 0.023; tannin, 1.60; gum, 3.04; glucose, 2.87; coloring matter, 2.56; water, 11.92; fatty substances, fixed salts, proteid matters, cellulose, and ashes, the rest.

Compared with coffee, cacao, and tea, Kola seed is the richest in proteid matters and hydrocarbons; in fatty substances, cacao holds the first rank, but Kola seed possesses the greatest quantity of caffeine, and, therefore, therapeutically considered, it is unquestionably superior to all the other three substances.

PHYSIOLOGICAL ACTION OF KOLA.

Putting aside the exaggerated and religious fervor with which certain African tribes cherish the Kola nut for its many virtues, the truth of the matter is that the large percentage of caffeine it contains places it in the category of *an excellent stimulant of the cerebro-spinal system.* Küss and Mathias Duval say that substances containing large quantities of caffeine favor the transformation of heat into force, and this is, in reality, one of the principal pharmaco-dynamic effects of the Kola nut.

The action produced by it in the circulatory system is somewhat similar to that of digitalis; that is to say, it increases the energy of the contractions of the heart, and diminishes at the same time their number, thus regulating the pulse; or, in more simple words, *it is a true cardiac tonic.* This important property of Kola has been experimentally confirmed by Gubler, Braker-Widge, Lépine, Huchard, Dujardin-Beaumetz, etc. Leven and Monnet injected in the femoral vein of a dog 10 cubic centimeters of an infusion of 20 grammes of Kola seed in 20 grammes of water, and obtained sphygmographic tracings showing an increase of the vascular pressure. The experiments made with cold-blooded animals gave also the same result. This augmentation of arterial tension proves that the heart retarded the frequency of its contractions, in obedience to the well-known law established by Marey that *the heart beats just as often as it is less easy for it to empty itself,* and thus proving its natural tendency to perform its work with uniformity.

In excessively large doses Kola nut diminishes muscular excitability, but in moderate ones it increases this power of contraction, especially of the muscular fibers of inorganic life, and may therefore be considered *a revivificating agent of the non-striated muscles.*

Its *diuretic effects* are very marked, and the reason of it appears evident when we remember that all diuretics produce their physiological effect either by increasing the energy of the heart's action, and thereby the vascular pressure, or by acting as a stimulus to contraction on very small arteries, and thus diminishing their natural caliber.

The bitter, aromatic, and mildly astringent taste of Kola seed, when masticated, renders it *a good carminative* and *stomachic tonic,* of great value in anorexia and merely functional indigestion, called by some atonic dyspepsia, by regulating the digestive functions from their commencement. Some authors go so far as to assert that it is an excellent remedy for sea-sickness.

When we reflect on the frequent presence of sarcinæ in the stomach, in connection with the above good results, and the assertion made by several travelers in equatorial Africa, that the natives render the decaying flesh of fowl eatable by immersion during twenty-four hours in a decoction of broken-up Kola seeds, *the anti-fermentative power of Kola* must also be taken into consideration. I, for one, know that in the island of Cuba the "güajiros" or backwoodsmen, make use of a wild seed for purifying marshy water (the same property being attributed to Kola seed by Heckel and Schlagdenhauffen), and I myself, at their suggestion, have placed the putrescent and stinking liver of a hen into an earthenware bowl with cold water, and a few of those seeds, slightly bruised, and seen the liver the next day with all the appearances of being perfectly fresh.

Based upon this rough popular experiment, those seeds are very much employed in the interior of my native country as a decoction or tea, and apparently with excellent results, in all affections of the liver, particularly the ones peculiar to hot climates. Unfortunately, I do not remember at this moment the name of those wild seeds, or anything more about them, but the facts stated above corroborate by analogy what it is said of the good results obtained with Kola seed in certain hepatic diseases.

Owing to the tannin it contains, Kola is *a positive astringent* which can be advantageously employed in all forms of diarrhœa, especially the bilious and mucus varieties, and also in sporadic cholera. The negroes of Western Africa themselves consider it a prophylactic against dysentery.

On account of its fatty constituents, its large quantity of starch, and its glucose, *it is a nutritive agent,* but not so valuable in that respect as commonly believed, and hence one of my reasons for associating Kola with cereal phosphates.

It also posesses *thermogenous property,* and it is, perhaps, due to this action that we must look for an explanation of the diminution of tissue waste that Kola nut is generally considered to exert.

Its *aphrodisiac property* is attributed by some observers to a peculiar glucoside called *kolanin,* and others believe it to be due to some phosphorized compound; but I think that if Kola exert any such action, the explanation is rather to be found in its decided stimulating effect upon the nerve centers.

A few investigators claim for it *a remarkable antagonistic action on the bad effects of alcohol upon the cerebrum and the cerebellum,* as observed by them when employed in cases of confirmed dipsomania, by restoring the shattered condition of the nervous system and the disturbed power of co-ordination. This cheering physiological action of Kola, though not yet sufficiently proved, reminds me of the brighting up and exhilarating effect of cannabis indica, and, in my humble opinion, may perhaps explain the remedial property of Kola seed in the group of symptoms collectively designated as neurasthenia.

PHYSIOLOGICAL ACTION OF CEREAL PHOSPHATES.

The phosphates have justly occupied an important position in therapeutics during these last few years. I shall give an extended resumé of their action in nutrition, and the good results they thus accomplish; but my principal aim shall be to show their valuable aid in preventing any depressive reaction that may follow the administration of Kola, or, more correctly speaking, in enhancing and making more lasting the good effects of that valuable drug.

The phosphates are distributed in the human organism to such large extent that, after water, they occupy the first rank. Iron phosphate is especially to be found in the blood, the lymph, and the milk; sodium phosphate in the plasmatic element of those liquids; potassium phosphate in the nervous tissue; magnesium phosphate in the muscular tissue; and calcium phosphate in the bones. The blood contains also the other four phosphates, besides that of iron.

The cereal phosphates are not only important constituents of the human organism, but they are, at the same time, necessary alimentary substances. Foods deprived of phosphates fail to support nutrition. If an animal is subjected to a diet completely devoid of phosphates, he will very soon waste away and die with all the signs of inanition. Even a plant that may germinate and develop in a soil deprived of phosphates, will not produce seeds.

Phosphated nutriment is just as indispensable to the organized being as is the nitrogenized aliment. Phosphates have, both as organic principles and alimentary principles, an equal importance to the nitrogenized elements, and the value of the different kinds of foods depends just as much on the amount of phosphorus compounds they contain as on that of nitrogen compounds.

Hensing discovered in 1715 the presence of phosphorus in the brain, and this constituted, perhaps, the first known fact relative to its composition. The phosphorized substance, called by Liebreich *protagon* (although other chemists deny the existence of such a body), must to-day be considered as one of the chief constituents, and may be the only constituent, according to Braumstark, of the white substance of the brain. Phosphorus and its combinations, therefore, play an important part in the animal economy, and due to this scientific truth phosphoric acid and the phosphates are being more thoroughly studied.

Dr. Paquelin, of Paris, in his "Biological Studies," has proved that nutritive, muscular, and intellectual activity—the three manifestations of the living being—are in direct relation to the amount of phosphates accumulated in the organism. When the equilibrium is altered, owing to diseased conditions, or to an excess or diminution of work in any of those three manifestations of life, we have to supply the deficiency of phosphates in some way, and for this purpose cereals are the richest and safest source of provision.

As living beings, both from the animal and the vegetable kingdoms, can neither produce new matter nor new force, in conformity with the great law of the conservation of force and matter, plants and animals only appropiate and assimilate already existing material which they transform into new forms of force. Aliments rich in phosphates, having the property to give increased activity to the organic functions, act as stimulating agents in the organism. In putting to the test, for that reason, a highly concentrated and extremely agreeable liquid food, as I have used in my clinical observations, in which the cereal phosphates are combined with such a vegetable product as Kola nut, acknowledged to be a general stimulating tonic, it will be found that the two work harmoniously together in the system, mutually helping each other in their action.

Dr. Kotliar (Vratch, No. 19, 1891), wishing to elucidate the action of Kola in increasing the power of the body to undergo a severe strain of work, made a series of observations in Prof. Manassein's clinic, in St. Petersburg, on the alteration of the chemical processes of the body when under the action of that drug. The quantity of powdered Kola nut taken per diem by each of the seven healthy young men, aged from eighteen to twenty-six, on whom the observations were made, was a drachm. From careful analysis of the food and excreta, it was found that Kola increased the assimilation of phosphorus, and diminished the nitrogenous metamorphosis, both during rest and muscular work. In other words, Kola appears to constitute what Dujardin-Beaumetz called *aliment d'épargne*, and Mantegazza *aliment nerveaux*. Cereal phosphates having the undoubted property, like all phosphates, of greatly improving the nutrition of the whole cerebro-spinal nervous system, to which Kola furnishes such an excellent food, their reciprocal actions and individual potencies serve an admirable therapeutic purpose in nervous affections of a debilitant nature, and in certain cachexias, when acting together in a pharmaceutical preparation such as I have employed.

Kola in combination with cereal phosphates produce also good results in disturbances due to want of proper sanguineous irrigation of the cerebro-spinal centers, by rallying the vaso-motor system. This is accomplished by the improvement of the mechanical work of the heart that Kola accomplishes, and the nutritive strength given to the vaso-motor nerves by the phosphates.

In nervous derangements due to digestive disorders, and contrariwise, in digestive derangements due to nervous disorder, the combination of Kola with cereal phosphates produces most satisfactory results. The characteristic toning effect of the one upon the nervous centers, and the nutritive and reconstructive properties of the other, favor organic restitution.

Diuresis being increased by Kola, in consequence of its action upon arterial tension, it implies a corresponding augmentation of the removal of tissue waste from the organism, leaving the formation of blood, nervous texture, muscle, and bone in a condition below par. The cereal phosphates come to the rescue in the upbuilding process.

So intimate and harmonious is the therapeutic effect of Kola in combination with cereal phosphates, that each enhances the value of the other; the latter acting particularly very much as the rear guard of an army—this advances and does most of the fight, while the rear guard supports it, and helps it to retain its position. A friend of mine has happily expressed the same idea by saying that Kola pushes the patient ahead, and cereal phosphates keep him there.

CLINICAL OBSERVATIONS.

I have given a fair trial to the combination of Kola with cereal phosphates, in the form of an agreeable cordial called Kola-Cardinette, representing 120 grains of the seed and 5 grains of the phosphates in each fluid ounce, the usual dose of which was a teaspoonful dissolved in half a wine-glassful of cold water, and obtained with it very gratifying results. I select a few cases:

1.—Mr. T. Q., forty-three years of age, a native of Cuba, a barber by occupation, had been suffering more or less for nearly two years with palpitation of the heart on slight exertion, dull pain over the cardiac region, dyspnœa, inability to breathe when lying down in bed on his back, and bronchial catarrh, evidence of fluid in the left side of the chest, increased area of cardiac dullness, displacement of the apex, a friction sound, bulging of the left intercostal spaces, and the feet swollen; there was no fever, no headache, no trouble with the digestion, and, in fact, outside of the signs above noted, he apparently was in good health. I first thought that it was a case of chronic pleurisy, but not being able to hear the pericardial friction sound posteriorly, and noticing that the bulging of the intercostal spaces was circumscribed to the upper part of the chest, in the region of the heart, together with my ability to distinctly hear the breath-sound both anteriorly and posteriorly over the lower portion of the lung, I concluded that it was a case of chronic pericarditis.

I ordered rest, ferruginous tonic in the form of pills, and instead of the infusion of digitalis one teaspoonful four times a day of the Kola cordial with cereal phosphates. In a week there was a marked improvement in the general appearance of the patient, the area of cardiac dullness was diminished, the cough had almost vanished, and the voice was clear and stronger; at the end of three weeks almost all signs of dropsy of the feet had disappeared, the patient could sleep more comfortable and do his daily work without suffering any palpitation of the heart, and had gained five pounds in bodily weight. There was still evidence of fluid in the pericardium, but reduced in quantity to less than one-half.

2.—Mrs. M. L., German-American lady, thirty-three years of age, widow without children, lymphatic temperament, inclined to melancholy, many years suffered from constipation and attacks of neuralgia; upon several occasions, also, she had rheumatic muscular pains, complained greatly of frequent nervous dyspepsia, pain in the back, heaviness in the loins and limbs, tenderness of the scalp and spine, and sudden flushes of heat on the face. There is an undoubted impoverishment of nervous force, accompanied by special idiosyncrasies in regard to food, medicine, household arrangements, etc., and mental worry on account of supposed financial troubles. I made the diagnosis of nervous exhaustion of purely functional character, or neurasthenia, called by some authors "nervous debility," "spinal irritation," "nervous asthenia," etc.

I ordered an appropriate diet, with as little of sugar and starchy substances as possible, daily exercise in the open air, avoidance of novel and sensational reading, plenty of sleep, a laxative every few days, a Russian bath every week, and a teaspoonful of Kola Cardinette in half a wine-glassful of water before each meal. Two months later, when I saw her again, she said that she "was feeling entirely like another person," and looked upon the world in a more cheerful light than she had for many years.

3.—An unmarried gentleman, thirty-eight years of age, healthy, strong constitution, regular habits, highly educated, a writer by profession, consulted me for an irregular and chronic diarrhœa he suffered, of entirely nervous character, and at times so sudden and painful was the seizure that he was forced to run quick to empty his bowels. He had been treated by several physicians for that most treacherous complaint without any marked benefit, the great difficulty in curing such a malady being its unexpected appearance and undiscoverable cause. Those physicians generally called it indigestion of some kind, but the patient believed (and I agreed with him) that it was more probably due to some connection with the nervous system than to errors of diet, because he had noticed that after excessive mental work he was more liable to it, and also as the result of a sudden chilling of the surface of the body. Suspecting some idiosyncrasy or hereditary predisposition, I asked him if he knew that any of his brothers or sisters suffered with the same malady, and learned that all (one brother and two sisters) are subject to it also. My diagnosis was at once made—hereditary nervous diarrhœa.

It certainly was caused by depressed nervous function, due to its inherited weakness, and the best way to treat it was, no doubt, to strengthen the whole cerebro-spinal system, though, of course, I could hardly expect a complete and permanent cure. I prescribed the Kola Cardinette in teaspoonful doses before each meal, and 10 drops of the tincture of nux vomica one hour after two of the meals. It is now three months since the patient began this treatment, and in all that time not even once has he suffered any attack, though at present he is engaged in a very laborious mental work. I advised him to continue the treatment for three months longer.

4.—I made use of the cordial of Kola in combination with cereal phosphates as a reconstituent tonic in the period of convalescence of a case of typhoid fever, and obtained peculiarly happy results. It prevented certain complications which are very liable to arise at that period of the disease, such as a return of the fever, either transitory or somewhat protracted, parotitis, and laryngeal ulceration.

5.—I also made a trial of Kola Cardinette in a case of general run-down constitution due to pregnancy. It was a South American lady, twenty years of age, of very nervous temperament, married only six months, and then in her fifth month of pregnancy, who suffered severely for two months previously with vomiting and loss of appetite, headache, and could not sleep well; she got very pale, lost considerable flesh, and felt weak, and short of breath. The great and natural loss of the assimilable phosphates in her organism, due to the necessities of the development of the embryo in utero, suggested at once to my mind the administration of a pleasant and agreeable preparation holding those important bone and nerve constituents in combination, with the general tonic and strengthening properties of Kola nut. Under the influence of this cordial in twice the amount of the usual dose, she gained flesh and strength rapidly, the appetite returned, the headache disappeared, and the sleep was long and sound. At full term she was delivered of a strong, healthy boy weighing ten pounds.

6.—Miss D. C., an American young lady from the South, eighteen years of age, slender built, nervous temperament, very fond of her studies, and brought up in great luxury and refinement, but, being the only child of rich and excessively loving parents, was kept too much indoors for fear she would make undesirable acquaintances or get suddenly sick and die. When I saw her she was suffering an inveterate anorexia, general paleness of skin and mucous membranes, lassitude, impaired digestion, a sense of fatigue out of proportion to the labor performed, either mental or physical, palpitation of the heart, and a murmur over its base, surface temperature below normal, and constipation. In a word, she was a typical case of chronic anæmia.

After ordering a complete change in her mode of living, good hygiene, and strong liquid diet, outdoor exercise and sea bathing, I prescribed Kola Cardinette in two teaspoonful doses, three times a day. In a few weeks the paleness of her skin had given way to a rosy color, she was active and cheerful, the cardiac murmur had vanished, the gastro-intestinal catarrh passed away, and her slender form began to look a little more full and round.

7.—In consequence of an attack of acute rheumatism, Mr. I. C., a middle-aged gentleman, was suffering from valvular disease of the heart and all the symptoms that that affection carries with it. Under the use of Kola Cardinette, the heart was better able to empty itself by the increased force of its contractions, the flow of blood and consequent irrigation of the tissues improved, the elimination of tissue waste brought out of the system with the greater amount of urine excreted was more easily accomplished, he could eat, digest, and sleep better, and, in fact, although I cannot by any means say that he was cured, his life was certainly prolonged and his existence was made more bearable. This is all that can be said in favor of digitalis or of any other cardiac tonic.

SOME EARLY EXPERIMENTS IN SERO-THERAPY.

By James Robie Wood, M.D., New York.

(Continued.)

THE methods and suggestions of procedures for preparing isopathic serum other than that of carrying morbid matter through living animals, as in my experiments during 1875, will require more time than I can possibly afford now. So an account of my clinical cases only will be recorded in this number. During those days of uncertainty as to the next experimental step to be taken, I was called to a case which somewhat changed the direction of my thoughts. It was that of a woman who was in the most abject misery from extreme poverty and the intense agony of an extensive cancerous ulceration affecting both breasts.

On account of its malignant character it seemed well adapted for making cancer serum for future experimental purposes. Therefore I carefully gathered material from both breasts on absorbent cotton and powdered charcoal, and prepared it by a process which will be given in detail in the closing paper of this series.

It had undergone the chemical changes, by which it was hoped to rid the material of its more dangerous properties, for nearly three years before I dared to make the first application to a human being.

Many doubtful cases had been under my observation, but in none of these did I dare to risk the use of the serum.

Some of these had already sought the advice of surgeons distinguished for their skill and good judgment. Although unwilling to pronounce some of these tumors malignant, yet without exception they had urged immediate removal.

At length two cases came to my office suffering from tumors of the breast undoubtedly malignant. One of these, within three days after the first application of the serum was made, entered a hospital, where the growth was removed, and two days later she died.

The second patient had suffered a long time from a painful tumor of her right breast before the destructive process had begun. At the time of her visit a deep and wide ulceration had resulted. A weak solution of the serum, representing about $\frac{1}{1000}$, was made, and she was directed to pack every part of the cavity carefully with absorbent cotton saturated with the fluid, this to be repeated twice a day. In mixing the solution for external application no care was taken to separate the debris of the substances with which the serum had been prepared. But that for hypodermic use was more carefully purified.

As the patient absolutely refused to permit the sub-cutaneous injection, the external application had to be depended on alone. Fifteen days after this first serum dressing the breast exhibited marked symptoms of improvement. The area of the ulcerated surface had diminished.

Within two months the opening had entirely healed, and the patient's general condition was better. After this it was impossible to induce her to remain under observation, or to submit to further treatment, which I was anxious to continue, fearing the possibility of her favorable symptoms being only a lull in the progress of the disease.

Within three years after the healing of her breast she returned to my medical care. The breast itself was apparently in good condition, but there was considerable dullness and other suspicious symptoms in the lung of the affected side. Again she refused all hypodermic medication.

Soon after this a serious pneumonia developed in the lung of the opposite side. In the right lung there were evident symptoms of progressive malignant disease.

She finally died from exhaustion, some time after the acute inflammation of the left lung had ceased.

The relief in this woman's cases was surely as good, if not better, than that afforded by surgical operations for removal of *really malignant tumors*, but this improvement without permanent benefit was unsatisfactory to me, so I sought other cases for extensive trials, and more thorough application of the serum. In my next, the closing article, I have but little more than disppointments to offer, but from these I hope to be able to deduce some valuable lessons.

AN ANATOMICAL THEORY OF SOCIETY.

By J. A. Carmichael, M. D., New York.

IT is a matter of public notoriety, that there are two opposing schools of sociology, the naturalistic school founded by Auguste Comte, who assimilates society to an organism, and the idealistic or rationalistic school, which dates from Rousseau and Kant, and admits no other reality than that of the individual. The first has flourished prominently, but one is forced to acknowledge that it seems to be on the decline. Its great promoter, Herbert Spencer, has nearly abandoned it through fear of the political consequences which it involves. "Let us leave, says he, this pretended analogy between individual and social organization. I have used these analogies, so laboriously obtained, but only as a scaffolding whereby to construct a body coherent with sociological inductions." M. Bougle-Jean Breton tells us that the latest German sociologists consider the organic theory as "altogher incompetent."

In France it is not accepted by M. Letourneau nor by M. Tarde, M. Renouvier, nor even by M. Fouillee, who transforms it into a theory of "organisme contractuel." A short time ago a candidate for the doctorate, M. Réné Worms, surprised his audience at the Sorbonne of Paris by his support of the following startling doctrine. From an anatomical point of view, society, according to M. Worms, is composed of cells, which are the individuals, and which form groups analogous to organs and tissues. Corporations, for example, are the social tissues ; the intellectual constitute the nervous system of society, its muscles are the manual laborers. It has an eliminating apparatus which serves it, as do the kidneys and sudoriparous glands, to expel individuals that are hurtful to its integrity. We may consider that this apparatus is represented by the police, by tribunals or courts and the prisons with their belongings. The rich constitute the adipose tissue, which disappears in the revolutions that often blot out their existence. Every tissue may become adipose, and thus the privileged classes are affected with a fatty degeneracy. Society nourishes itself, and it has a circulatory system, of which the money market is the regulating heart, merchants are the globules, business operations are the vessels and bankers, the vaso-motor nerves. It may be said that the iron railway is prolonged by the telegraphic wire, as is the blood vessel by the nervous fillet. Tariffs are nothing more than ligatures put upon the vessels to cause the blood to flow back upon the places that need them. Societies are reproduced by scission, colonization or by union or conquest, the conqueror being the male and the conquered representing the female element. They are subject to disease, which is war, with its wounds and suffering, and may die. They should be cared for and a specific Allopathic medication should be applied. Karl Marx and the "collectivists" are the Homœopathic representatives." It seems not an inapt illustration to compare the varieties and ramifications of social life with the multiple elements that unite in making up and perfecting the organic human body. It therefore might be a curious and interesting study to view them from the standpoint assumed by M. Worms in his lecture at the Sorbonne of Paris, with a little more of detail, by which the assimilation might be more definitely indicated and comparison more clearly defined. Beginning with the cells of M. Worms, as representing the individual constituents of society, and remembering that the fundamental principle of life is embodied in the cell, and recalling also the apothegm of Virchow, "Omnis cellula e cellula," which is but the more modern and more scientific interpretation of the old "Omne vivum ex ovo," it will not be inconsistent with the varieties of social life, nor with the revelations of science, to consider an individual in his relations to society as a representative of a cell endowed with vitality, and therefore an integral element in its organic structure. Again, as we know from the teachings of cellulology that one cell differs from another in its construction and its procreative power, whereby the various structures of the human body are created, formed and perfected, so may the varieties and peculiarities of human individuality in social life be estimated as the natural result of the operations, physical, mental and moral, of the cell of which he is the product.

As the cells of organic life form organs and tissues, so in social life the social cell, so to speak, as represented by an individual, assists in forming groups analogous to organs and tissues, or corporations resulting from the aggregation of individual social cells. As the cells of organic life differ in physical character, in procreative power and in functional operations, so the individual social cell partakes of the same differential characteristics, and the groups or corporations resulting from social cell aggregation represent the phases and varieties that we see in the construction and manifestation of the properties and peculiarities of the social system. Again, the intellectual portions of the social system have their prototypic analogies in the nervous system of the body, and the argument holds good in this direction also. In organic life we know from anatomy, physiology and cellulology that the manifestations of life in this department of our being are due to the functional operations of the highest and most exquisitely endowed of the cell structures of the body, the emanations from which constitute the mental, moral and emotional powers that we call the mind. The intellect and the senses that elevate and purify on the one hand, or on the other, the passions, the lusts and all the grosser attributes that degrade and defile.

The next phase in the construction of the argument of M. Worms is as to the analogy between the motor powers of the body and that element of the social organization represented by manual laborers or "hewers of wood and drawers of water." But in the effort to establish this analogy it should not be forgotten that these motor powers are also of nervous origin, or to speak with more physiological accuracy, that the motor agencies of the body are to be regarded as the submissive instruments of the commanding and irresistible nerve force that "subdues all things unto itself," and, though holding a comparatively degraded position in the functional properties of the organism, they—the motor agencies—should be considered in view of their indispensable importance in the economics of the body, and the part they play in the perfection of the whole. The predominating influences of the intellectual and other nerve forces upon these inferior agencies find their social analogue in the overshadowing powers exercised by intellectual and social pre-eminence over the humbler occupations and interests of life.

So then the suggestion made by M. Worms, and the analogy he seeks to establish in this portion of his argument are well taken, and materially help in its construction. Next, as to the eliminating forces of the body as represented by the kidneys and the sudoriparous glands, to which M. Worms might have added the whole system of secretion and excretion. The parallel drawn here in the existence and maintenance of tribunals or courts of justice, the police, and the other elements of the machinery for the dispensation of law and the carrying out of its behests, is apt and of attractive ingenuity. It might have been extended to the illustration of the analogy between the elimination by these agencies of the physical body of effete and hurtful excretions, and the too frequent necessity that occurs in the body politic for the elimination of the same hurtful excretions among the manipulators of this very machinery for the dispensation of law, and the prosecution of its behests. It's more than probable that if M. Worms lived in New York, and had drawn his analogies from contemporaneous history—social, legal and political—he would have had other curious experiences and analogies to tack on to his argument. Again, he says: "The rich constitute the adipose tissue, which disappears in the revolutions that often blot out their existence. Every tissue may become adipose, and thus the 'privileged classes' are affected with fatty degeneracy." This is the most pregnant item in the argument of analogy, and to do anything like justice to its truthfulness and its portrayal of the affinity of the adipose tissues of the body and the social organization would carry us too far afield, and beyond the limits of editorial privilege. It would be seen at a glance that it would involve the consideration of the influences exercised upon the construction of the social system by the so-called privileged classes, who wax fat, even to degeneracy, and control society by the overbearing tyranny and insolence of possession, and the moral obesity of the "proud man's contumely." The disappearance of this form of social adipose tissue by "the revolutions that often blot out their existence" is a clever definition, by M. Worms, of the instability and often illusive unsubstantiality of wealth, speedily gained and as speedily lost. Unhappily in these conditions it often happens that there is a fearful melting and dissolving of the moral man by these same "revolutions," a moral adipose emaciation that leaves bare the skin and bones of reputation and good name, a ghostly simulacrum of social adiposity, a shadowy outline of what once represented "the privileged classes."

Another form in which adipose social wealth makes its manifestations, may be seen in the antagonism between capital and labor, and by which the overthrow of the whole social fabric may be threatened and social bonds disrupted. Indeed, in these days of socialism and social antagonism, the whole social problem is involved in this feature of the argument of analogy. "Society nourishes itself, and it has a circulatory system, of which the money market is the regulating heart, business operations are the vessels, merchants are the blood globules, and bankers the vaso-motor nerves." In this anology, M. Worms embodies the whole curriculum of the operations in the money marts of the world, money being the central organ, the heart of the body financial, whose propulsive energies are devoted to social nutrition, the circulatory system of vessels, like those of the physical body, representing the ramifications, windings, twistings and turnings and the intricacies, evasions and duplicities of business methods, the omissions of right and the commissions of wrong. The likening of bankers to the vaso-motor nerves is a sharp and incisive parallelism of that mysterious and subtle force in the ganglionic agencies of the sympathetic system which propels the globules—merchants—by their business operations, along the vessels, the avenues of trade, and thus is the round of financial circulation maintained and the analogy completed. "Tariffs are nothing more than ligatures put upon the vessels to cause the blood to flow back upon the places that need it."

In this item of his socio-anatomical disquisition we might here, in this country, be able, perhaps, to furnish M. Worms with another solution of the effects of the application of his ligatures upon the socio-anatomical body than that adopted by him. In one respect the analogy holds good, and the tariff ligature supplies a need here too, but it is a political need. So we'll shift the application of M. Worms' tariff ligature from the blood vessel to another part of the socio-anatomical system, the œsophagus, and substitute for the ligature a funnel or probang with which to cram and gorge the greedy and insatiate maw of a political party, and keep it glutted with political pap and immersed breast-high in the crib of political plunder. No more appropriate time could be selected for the illustration of this item of M. Worms' socio-anatomical analogy than that which obtains at the present period of the political history of this country. We are upon the eve of a Presidential election, and even now the political cauldron is being made ready to be filled with protection and anti-protection, silverism and anti-silverism, populism, socialism ,occultism, atheism, spiritualism and all the other polymorphous elements of political hate, rancour and strife, and we know of no form of language that will more fitly describe the vile compound of political bitterness and venom than the crooning incantation of Witch Hecate and her weird sisters:

> "Fillet of a fenny snake
> In the cauldron boil and bake,
> Eye of newt and toe of frog,
> Wool of bat and tongue of dog,
> Adder's fork, and blind-worm's sting,
> Lizard's leg and owlet's wing,
> For a charm of powerful trouble,
> Like a hell-broth boil and bubble,
> Double, double, toil and trouble,
> Fire burn and cauldron bubble."

For the analogy from anatomy we can think of nothing more appropriate than the frothing, foaming throes of hydrophobia or tetanus, or the racking spasms of reflex uterine eclampsia. "Societies are reproduced by scission, colonization, or by union or conquest, the conqueror being the male, and the conquered representing the female element. They are subject to disease, which is war, with its wounds and suffering, and may die."

This suggestion of M. Worms is susceptible of more than one interpretation, and we must endeavor to find the anatomical analogy that will adapt itself to them.

By one interpretation, the reproduction of society by scission, is accomplished by means of the constant infusion of heteromorphous elements that permeate it to its minutest ramifications. As time advances, and the world grows older, the vagaries of the human mind, and the irresistable tendencies to change, and to the introduction of heretical and revolutionary doctrines—the more heretical, revolutionary and bizarre the better—into the natural and reasonable order of things, but serve to unhinge the public mind, to implant new articles of faith, or to uproot whatever of faith there may have been, and leave none at all, in God, man or the devil, and thus sow the seeds of dissension and strife, the harvest of which is the prostitution of public morality, and the contamination of social life, until it represents a veritable tower of Babel, clamorous with polyglottal vice, dressed up in alluring form, and defiant of the more decent public opinion. All this comes under the head of what M. Worms appropriately calls "social disease and war, with its sufferings and its wounds, from which it may die."

THE MENTAL ELEMENT IN THERAPEUTICS.

In drawing attention to Dr. T. S. Clouston's recent address before the Royal Medical Society of Edinburgh, the *Boston Medical and Surgical Journal* has some judicious remarks on the above topic. "It is not our purpose," the editor premises, "to attempt a defense of hypnotism. Sober experience of the future may show that the inducing of deep sleep is not practically useful for the relief of morbid conditions; much recent investigation would seem to point in this direction, but what the scientific study of hypnotism has done—and this is its notable service—is to establish a principle of mental treatment on rational grounds. Looking at the matter broadly, we must regard the general movement, which began with the active study of hypnotic phenomena, as one of the most significant in the history of modern medical advance. Its consequences we are now beginning clearly to see in the intelligent application of so-called 'suggestion' to varied morbid conditions, not 'as a last resort.' Still, the average physician remains apathetic; his chief interest centers in the physical manifestations of the disease with which he is dealing, and consequently with physical measures for its relief. He is not apt to regard as of essential importance the patient's mental attitude toward his disease, and to work systematically for its relief through purely psychical means. An absolutely clear recognition of the interdependence of physical and mental in our organization remains, for the most part, unattained. * *

"Could our teaching be such that every physician on beginning practice were equipped with an adequate knowledge of the entire organism, with which he will be called upon to deal, the just reproach of the neglect of systematic mental therapeutics would quickly be laid aside. At present our medical curriculum is unquestionably one-sided in the stress it lays upon physical therapeutics and the slight it imposes upon mental therapeutics. Such an article as this of Clouston's should, at least, do something towards bringing home to us the importance of a complete thereapeutic system.

"In conclusion we cannot resist quoting a paragraph in full, which admirably expresses the common attitude toward the entire subject, and especially the curious distortion which the word 'scientific' has suffered in the popular mind:

"'If some people want to imply that a patient's symptoms are unimportant they call them "nervous"; if they want to ticket them as unworthy of consideration altogether they call them "mental," and if they want to brand them as quite absurd and out of the pale of human sympathy or medical effort they call them "hysterical." One would imagine from these things that the phenomena of sensation, normal and abnormal, and those of consciousness, feeling, judging, willing and memory and their disturbances through cortical disease, were not comprehended in true scientific work at all, and that mind generally and nervous influence might be left out of account by the physician. A man breaks his leg, and it is said to be put up on "scientific principles." He loses his memory, his energy of will, his social instincts, and in the diagnosis and treatment of his disease the word "scientific" is exchanged for terms which are often vague and meaningless. The mental attitude of the physician is often changed somehow when he is treating his patient's indigestion and constipation, as compared to that with which he considers and treats the mental pain that accompanied and, perhaps caused the indigestion. The indigestion took its real origin, it may be, in a disturbance of the action of the mind and brain cortex, but the stomach only is thought of or treated by peptones, acids or laxatives, and this is called "scientific treatment." We do not need to hypnotize a patient to show that the mental centers in the cortex have the power of directly influencing physiological function and tissue nutrition.'"

G. L. F.

The *Revue Medicale*, of Paris, France, which was bimonthly, has become weekly, under the editorship of Dr. Paul Archambaud. It is one of our most esteemed exchanges.

The New York Medical Times

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REMOVAL.

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CO-EDUCATION.

THE co-education of the sexes in the higher branches of science, especially preparatory to a professional career, has been so successful in Cornell and other institutions where the experiment has been tried, as to be rapidly gaining in public favor. If the sexes are to share in the duties and the responsibilities of the same profession, if they are to be daily brought in professional contact, it is evident the same facilities should be extended to them in their preparatory work, and they should alike be held responsible for their professional lives, judged not from the standpoint of male and female, but solely from that of physicians. Our most popular nurses with men are female nurses. They enter the sick room as nurses, and are ready to perform any and every duty necessary for the relief of the patient, and they are none the less pure, none the less delicate, none the less fitted to take their place among the cultured and refined for the character of their work.

The shadows of old prejudices and of old ideas respecting woman's work and woman's field of usefulness still darken our atmosphere and antagonize wiser counsels. The female nurse is admitted to our hospitals as an important part of the working staff. In the operating room no one is so efficient, and by the sick bed no one so watchful, no one so delicate in touch and prompt with remedial agents. Where is the consistency, then, of admitting the female nurse and shutting out from the hospital in professional work the female physician? The profession is wisely open to both sexes. Is there any justice, then, in giving one every facility for efficient work, and compelling the other, if they will make bricks, to make them without straw? A recent law and a very wise one compels every State insane asylum to have on its medical staff a female physician. In our insane asylums there is a very important reason for this action, which does not prevail in the ordinary hospital. The exclusion then is the result of prejudice, or more likely thoughtlessness on the part of the officers of the institution, whose attention has never been specially called to the matter. We are inclined to believe if the matter is properly presented, this, as it seems to us, simple act of justice to an important part of the medical profession will be cheerfully granted.

We hear of another important step contemplated by one of our leading universities which will have a very important influence upon the efficiency and learning of the profession. Several of the most important branches of medical education form a part of the curriculum of study in our great universities. Cornell, we hear, contemplates a still further advance in its university work, by increasing its preparatory course from one to two years. The four years of study under the necessary legislative action may be in that case divided, two years being spent in the preparatory course of the university, and two years in such medical college as the student may elect. The university part of the course, would include those studies which could be pursued in the laboratory and the lecture room and the field with greater facilities and more systematic instruction by men whose lives are devoted to a specialty than could be obtained in the general course of instruction in our medical colleges. The two last years could be devoted under this arrangement more systematically and intelligently to clinical instruction, which is always to be had in abundance in our large cities, and which, in the present standing of the profession, is of so much importance to the young physician. Of course, this would at first be an experiment, but it is an experiment which has been satisfactorily solved abroad, and we are inclined to think would be equally satisfactory here.

RAPID DILATION OF THE OS AND DELIVERY.

IN a paper read before the State Society, Dr. Harrison Willis gives a graphic picture of the dilation of the os and rapid delivery which we have found from many years' experience safe and effective. The fingers and the hands are much better agents in the work than any other device. The hands and arms are first thoroughly cleansed and disinfected, the patient anæsthized and placed on the back. "With one hand over the fundus of the uterus, two fingers of the other, which have been well lubricated, are introduced within the vagina, and if the os is not at all dilated the forefinger is gently insinuated to the first joint within the os; after waiting a moment to the second joint, and held there for a short time. The finger is now withdrawn and the first and second fingers are introduced to the first joints; another interval and they are worked up as far as they can conveniently be with the fingers outside; next, the whole hand is carried into the vagina. In a primipara with a rigid os, the time taken so far should not be less than ten minutes. Then the tips of the three fingers should be introduced, and with the same intervals carried up. Then the four fingers in the same manner should be slowly wormed up to the knuckles, and the hand partly closed after a short time, which will still farther dilate the parts. The fingers and thumb now should be formed into a cone and gently pushed up within the os. This may all be done within one half hour if the parts are rigid, but should not be accomplished in much less time for fear of a laceration. This can and should be done without removing the hand, as by so doing there will be less danger of any infection. Now, without withdrawing the hand a careful bimanual examination should be made, the presenting part noted; if it be the head a positive diagnosis should be made by examining an ear; the hand should be swept around the lower zone of the uterus to feel if the placenta or the cord is there; then with the hand on the abdomen above the pubes, with the assistance of the hand within, the vertex should be gently but firmly pushed into the superior strait, when by proper axis forceps, such as I have had made and have used for many years, the child should be quickly delivered. But in some cases, owing to the unusual protuberance of the sacral promontory or the exceeding size of the fœtal head, it cannot be pushed into the strait so that it can be properly grasped by the forceps. I will state here that proper forceps never slip if they embrace the base of the skull; if they slip it is because they grasp the top of the head only. In such a case we may deliver by turning, which we should usually do in prolapse of the cord if it cannot push up so that there will be no danger of grasping it with the blades of the forceps.

"As I have, by the above method, delivered a great many women in uræmic convulsions, coma, etc., I can recommend it as the safest possible way. No instrument ever devised can be so harmless to dilate the parts as the fingers and hand, if properly cleansed. Labor can be brought on at any time after the seventh month with comparative safety, but of course it should not be done unless there be a necessity for it.

ANTITOXIN FATALITIES.—Quite a stir has recently been made in Berlin (*Drugg. Circ.*) by the death of a child suddenly following the injection of diphtheria antitoxin. The child was apparently in perfect health and the injection was given as a prophylactic, a case of diphtheria having occurred in its home. The father, a medical man of much prominence, made announcement of the fatality in the daily papers, causing notices to be printed in large type, in which the diphtheria serum was named as the cause of death.

According to a report in a late number of the *Journal of the American Medical Association*, a similar fatality occurred at Portsmouth, O., some weeks before the Berlin case. Diphtheria had broken out in a mild form in the family of a gentleman of that place, and a boy, five years old, in whom no symptoms of the disease were apparent, was given a prophylactic injection of the serum. In five minutes afterward he was dead, apparently from paralysis of the heart.

Dr. J. L. Taylor, who reports the case (which occurred in the practice of another physician) says that the serum was fresh, and adds the following comment: "The doctor, one of the first to introduce antitoxin into medical practice in Portsmouth, was an enthusiastic advocate of serum therapy, and presumably used all the precautions which skill and experience can suggest. This terrible accident, therefore, can have but one meaning. It furnishes absolute proof of the inherent danger of antitoxin as a therapeutic agent. Cautious scientific observers have insisted from the outset that a substance capable of acting on the economy with the alleged effects of antitoxin must necessarily be a powerful agent. * * * Whatever may be the final verdict of the profession as to its merits as a remedy in diphtheria, the fact should not be lost sight of that it is a most powerful agent, that the contra-indications to its use are not yet well ascertained, and that it can be an active instrument of great evil as well as possible good. It is not often that the evidence of the ill effects of an alleged remedy is as clear as it is in this case. Given as a prophylactic to a healthy child, disease cannot be credited with any share of the result. No one can doubt that antitoxin kills and that, too, right speedily.

While not exactly germane to the matter, we might here add that Dr. Carl Strueh has lately advanced the idea in the *Journal of the American Medical Association* that the decrease in mortality from diphtheria, as shown by statistics since the introduction of the antitoxin treatment, should not be ascribed exclusively to that treatment. He thinks a very important factor is that the serum-therapy, though not absolutely harmless, is less harmful than drug treatment formerly used, and favors hydro-therapy as a still better procedure.

DIPSOMANIA.—Dr. Kuman, in discussing this subject in the *Medical Standard*, says dipsomania is a true periodical insanity, of which the drink element is a mere phase. The abuse of alcohol is a mere expression of the insane tendency. Dipsomania, as a rule, is one of the degenerative states demarcable from simple imperative conceptions and inebriety. During the dipsomaniac periods these patients, like all periodical lunatics, are absolutely irresponsible. In discussing this question, Dr. Crothus, in the April issue of the *Quarterly Journal of Insanity*, says:

Periodical inebriates often manifest delusions in the free intervals that are not recognized. In one case the most miserly parsimony and dread of poverty appears. Every thought and effort will be directed toward the accumulation of money, even up to dishonesty, causing distress among all associates. When the drink period begins he is generous, kind, and benevolent. The free interval in another case is a period of contention, suspicion, distrust and doubt of the reality of appearances and motives of every one. Pessimism in its most aggravated form appears. A great variety of most complex mental states appear, which are delusions both transient and fixed. The common form is the intense religious fervor seen in persons whose drink craze has subsided. This becomes a burning zeal to rescue others by what is called gospel temperance work; or, more recently, in wild hysterical praise of gold-cure specifics; or entering upon the work of curing others with unusual credulity by unknown specifics. These delusions always end in relapse sooner or later. The more prominent they become the sooner they explode. Recently I had a case that, after the subsidence of the drink craze, became insanely slanderous. Nearly all the waking moments were occupied in finding dishonesty and falsehood in others. Every hint or possible act was construed into treachery and baseness. Corruption was discovered in everything; no one was free from wrong. There was a peculiar maliciousness and insane cunning in this that could not be mistaken. The physical basis for it was manifest in the great improvement from sharp eliminating treatment, by purging and baths. In another case sexual delusions of the immorality of others, and the efforts to entangle the person, would come and go every two weeks.

Delusions of persecution by friends, relatives, wife or parents are also common, but usually unfixed and changeable.

These conditions are loosely termed "crankisms," and in most cases are organized and systemized into open or concealed beliefs. They are always dangerous, because unknown, and likely any moment to develop into acts that may be serious. These delusions are false beliefs which are, in most cases, without any foundation or reason from without. They are the workings of defective cell activities, which project themselves to external objects, apparently governed by no known conditions. In all probability they exist in all cases, but are easily corrected and transient in most instances. After a drink paroxysm the senses are defective, and the power of analysis weakened. Discrimination between the true and false is imperfect and misleading. This, in most cases, can be called unsystemized delusion, while in others it is systemized. The mental peculiarities of reformed men is a new field for the study of these delusions.

QUICK FILTRATION OF URINE.—A writer in the *Boston Medical and Surgical Journal* recommends the following as an extremely easy and satisfactory method of obtaining a small quantity of clear urine from a cloudy specimen in order to make the usual test for albumen: a small quantity of the cloudy urine is placed in a test tube, and the mouth of the tube plugged with cotton to a moderate degree of firmness. A second test tube is placed with its mouth to the first. The position of the tubes is now reversed, so that the one with the urine is bottom upward. The upper tube is now carefully and gently heated over the flame of a Bunsen burner or an alcohol flame, and the expansion of the air above the urine immediately forces it through the cotton plug, and the filtered urine collects in the lower tube. In this way one imitates the rapid filtering apparatus of laboratories, but using pressure above the fluid to be filtered instead of an air exhaust below.

POISONOUS EFFECTS OF BORAX.—At the present time there are a vast number of preparations intended for the cure and preservation of foods, which depend for the claim advanced upon the large portion of sodium biborate contained. This fact has led Fére, of Paris, who has had considerable experience with the drug in the treatment of intractable cases of epilepsy, to investigate its physiological action. He several times found it necessary to give large doses for long periods, and frequently met with persons who were peculiarly susceptible to the drug. The untoward effects were loss of appetite, succeeded by burning pain at the pit of the stomach, buccal dryness, and eventually nausea and vomiting. Also a remarkable dryness of the skin was produced, which not only favored, but in several instances caused, skin maladies, notably eczema; the hair, also, became dry and fell out, threatening complete baldness. The most dangerous result of the use of sodium biborate is its power to increase kidney disease, or to convert a slight renal malady into a fatal or malignant affection.

RESTRICTION OF TUBERCULOSIS. — Prof. Victor C. Vaughan contributes a valuable paper on this subject to the transactions of the Colorado State Medical Society for 1895. Prof. Vaughan deals largely with the life history of the organism, how the disease is acquired, and how it may be prevented. He rightly believes that there is no evidence that climate gives immunity to the disease. Acquiring tuberculosis and arresting its progress when once acquired are two different things. Prof. Vaughan advocates, among other measures, that schools for the instruction of consumptives in the methods of taking care of themselves and preventing the spread of the disease should be established. This would result in lengthening their own lives, in rendering them more comfortable while they do live, and would save others from infection. These schools should consist of model hospitals where the consumptive would be both patient and pupil. Dr. Vaughan declares that every State should establish one or more hospitals for the education and treatment of its consumptives.

THE New York School of Clinical Medicine is the latest addition to our metropolitan schools for post-graduate medical instruction.

The advantages this school offers the profession are based upon the system followed in Berlin by the *Privat-docenten Verein*, the organization from which all clinical instruction is practically obtained by physicians seeking more complete information in special studies of medicine.

The headquarters of the school are in connection with the West Side German Dispensary in West Forty-second street, but the material for study is distributed over the various medical clinics of the city.

The value this opportunity affords medical men, seeking to brush up on special branches of their profession, to come into direct association with both teacher and patient, it is hoped will be fully appreciated by the profession, as no similar advantage, up to date, has been offered by any school or organization in this country.

YEAST NUCLEIN IN THE TREATMENT OF HIP JOINT DISEASE.—The *New York Medical Journal* contains an exceedingly interesting account of the treatment of hip joint disease with very marked success by the use of yeast nuclein. The report is preceded by a brief statement by Dr. Hitchcock, of Detroit. He says:

"In the *American Lancet* for January, 1895, Dr. Charles W. Hitchcock, of Detroit, remarks that not all cases of hip disease are, with any fair promise of success, amenable to conservative treatment. Cases long neglected, in which erosion of the joint structures has already occurred, together with suppuration and resulting fistulæ, are not encouraging instances for non-operative measures. An early diagnosis is of the utmost importance, that the case may be taken in hand before gross and irreparable damage has placed it beyond the reach of any save the most heroic treatment.

"The nucleins," says Dr. Hitchcock, "are among the newer remedies that may do much as an aid to tissue-building, more especially as they are said to influence cell metabolism so as to bring about a healthy resistance to disease processes.

"The germicidal properties of nuclein he," continues, "have been demonstrated, and Vaughan and McClintock have shown that the germicidal constituent of blood-serum is a nuclein." Parke, Davis & Co., he says, have rendered yeast nuclein accessible to the profession. They make it for Dr. Vaughan and according to his formula; the solution which they supply is about a 1 per cent. solution. Of this solution of yeast nuclein, from 5 to 60 minims may be administered at a time. The dose may be increased gradually and cautiously from the initial dose (which may appropriately be about 10 minims), regard being had to the febrile reactions, which may be decidedly marked and are to be looked out for.

AIROL.—*An Iodo-Bismuth Preparation.* The unpleasant odor of iodoform has made it such an unpleasant element in the sick room that chemists have long sought a substitute which, while it possessed its powerful antiseptic properties, would be free from its disagreeable and often sickening odor. This substitute, it is claimed, has been found in airol, which, submitted to the most careful tests, has proved so successful that it has been adopted in the place of iodoform in many of the European hospitals. It is not only perfectly free from odor but is non poisonous, and has no toxic and irritating properties. In chancroids, ulcers, purulent ophthalmia, acute and chronic gonorrhœa it has been found on account of its great antiseptic and less irritating properties to iodoform superior in its application to that drug. A 10 per cent. glycerine emulsion is used in gonorrhœa, reduced if necessary by a larger amount of water, three to five injections being sufficient.

WE regret to hear that Dr. John Aulde has retired from the editorship of the *American Therapist.* It was one of the most original and readable journals on our exchange list.

SIR JAMES KITSON, the brother-in-law of Dr. Playfair, it is said, will pay the damages and costs of the recent suit, amounting to nearly $50,000.

BIBLIOGRAPHICAL.

TENTH ANNUAL REPORT of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania, 1895.

THE NEWER REMEDIES. We have received from McKesson & Robbins a neat pamphlet containing "The New Remedies," with a brief description of their formation and action. This will be sent to any physician on application.

THE *Arena*, notwithstanding the reduction of the price one-half, shows no decrease in the ability with which it discusses the great questions of the day. The May and June issues are more than usually rich in literary and scientific articles. The *Arena*, to the scholar, the thinker, the lover of choice literature, fills a place which no other journal occupies. Each issue contains 200 pages of original matter, with editorial notes and world of books.

THE TREATMENT OF PHTHISIS. By Arthur Ransome, M.D., F. R. S. London: Smith, Elder & Co., 15 Waterloo place, 1896.

The author has confined his observations to his own large and more than usually successful experience, in which he has kept in touch with the ablest investigators upon this subject, utilizing their work whenever it seemed indicated. Dr. Ransome believes that phthisis, kept under proper supervision and intelligently treated, is to a much larger extent amenable to treatment than is generally believed.

"LITTELL'S LIVING AGE." There is no journal which keeps one so truly in touch with the great minds of the Old World as *Littell's Living Age.* The choicest articles, not abstracts, but entire, in the language of their authors, are transferred from the ablest journals in every department of literature in Europe to the weekly pages of a magazine, which, for the past half century, has done more than any other journal to cultivate the taste and mould the thoughts for good of our people. Among the notable articles in the last issue are "Cardinal Manning and the Catholic Revival" and "Personal Reminiscences of the Great English Cardinal," by Aubrey de Vere.

DISORDERS OF THE MALE SEXUAL ORGANS. By Eugene Fuller, M. D. Philadelphia: Lea Brothers & Co., 1895.

The author covers a broader ground than is generally occupied by writers on this subject, taking the position that pathological and physiological factors in connection with the apparatus actually employed in the sexual act are oftentimes the direct causes for sexual and other allied disturbances, the psychological and neurotic conditions being in the minority. He thinks that every case should be examined from the three different standpoints enumerated and a differential diagnosis reached before active treatment is commenced. The subject is skillfully handled, in such a way as to lead to a correct diagnosis and a more satisfactory treatment.

OBSTETRIC ACCIDENTS, EMERGENCIES AND OPERATIONS. By L. C. H. Boislinier, A.M., M.D., LL.D. Profusely illustrated, Philadelphia: W. B. Saunders, 1896.

This book is not a treatise on medicine only nor a manual of obstetrics, but a work easily carried in the pocket for ready reference in cases of emergencies. Frequent reference is made to cases occurring in the author's hospital and private practice, extending over a period of forty years. Part I. is devoted to accidents to women, Part II. to obstetrical operations, and Part III. to accidents to the child.

The work is timely, full of excellent suggestion as it regards diagnosis, prevention and treatment clearly and forcibly presented, and can be studied by every physician with much practical benefit.

TWENTIETH CENTURY PRACTICE OF MEDICINE. An International Encyclopædia of Leading Authorities of Europe and America. Edited by Thomas L. Stedman, M. D. In twenty volumes. Vol. V., Diseases of the Skin. Wm. Wood & Co., publishers.

This volume is rich in contributions from some of the ablest specialists in England, France, Austria and America. Of American specialists the list includes Charles W. Allen, John T. Brown, L. Duncan Bulkley, James Nevins Hyde, Douglas W. Montgomery, Arthur Van Harlingen and Henry H. Whitehouse. England is represented by H. Radcliff Crocker, France by L. Brocq, of the Paris Hospital and H. Leloir, of the University of Lille, and Vienna by Moriz Kaposi, one of the most profound scientists of Austria.

We are specially interested in the work of Leloir, covering nearly 150 pages on dermato neuroses, who has been one of the most original and careful investigators of neurosis of the skin, and has shown what is now admitted by most authors of skin diseases, that it constitutes one of the most important divisions of cutaneous pathology, and points the way to a more scientific and satisfactory treatment of an exceedingly troublesome class of diseases. It has only been of recent date that this subject has been placed on a solid basis, and that has been since the scientific demonstration, to which Leloir has coutributed so much, was made of the part which the nervous system plays in the nutrition of the tissues, and especially that of the skin. This volume is fully up to the high standard of the series.

THE INTERNATIONAL HOMŒOPATHIC CONGRESS.—Dr. Kraft, of the *American Homœopath*, promises to take a number of ladies and gentlemen to London and return by the Montreal steamers for $70. Their quarters will be in the second cabin, with first cabin fare.

CORRESPONDENCE.

EDITING AS A "BUSINESS."

Homœopathy in the United States escaped alive from one peril—the publisher. For long, Radde was the autocrat who declared what should be said and how; and all this was before the editor of the *Medical Century* was even epididymisiacally existent.

Radde's successors, Messrs. Boericke & Tafel, inaugurated an entirely different era. They gave independent authorship and also dependent editorship a wide liberty; and if a poor publication came from their press it was because of their misplaced confidence in an equally misplaced editor or author.

They went even farther; they recognized the function of the critic in its high value, and they encouraged its exercise with the loftiest spirit of disinterestedness. I remember once writing to the late Mr. Tafel that I should decline criticising a certain book sent me by him because I could find only the most emphatic condemnation for it. At once came the reply: "You will please go on and review the book, and when we put out a poor book we will thank you to say so plainly." This was something other than "business"—or better, it was *business* as it should be. I trust that the editor of the *Medical Century* will take time to perpend this example.

He, in his youthful exuberance, usurps the censorship of the critic, forgetting, or not knowing, that this is the inalienable prerogative of every reader of the criticism. If the critic is incompetent, or biassed, or unjust, his criticism carries in it and with it its own and his condemnation. The impudent interference of either author or editor is to be rebuked; if the thing criticised is not its own "strong defence," then every word of author or editor in its behalf is simply and only an impertinence, to say nothing of its *superfluity*, which, the young man of the *Medical Century* should make haste to learn, is an insult to the learning of his betters.

I should explain, for the benefit of many of your younger readers, that I am a retired critic, "whose sands of life," etc., are yet sufficient to enable him to stand up for the rights of that ancient and honorable guild. Before today I have "gone for" a fellow critic whom trade jealousy deflected from the honest judgment. I advised him to "Drink fair, Betsy, wotever you do!" and I do not know that he ever again wrote a criticism in drink. I hope I may be able to succeed as happily with

> "The falcon towering in her pride of place."

of the *Medical Century*. How far I am safe in using the name "falcon," I cannot say; I do not know how far the editor of the *Medical Century's* knowledge of ornithology extends; he may know as much about it as he does about surgery and *manipulating Homœopathic meetings*—and he may not; he may have mistaken the autumnal flight of a gray goose across a gusty common for a "falcon's" soaring; he once saw shining before him with hospitably extended arms a "chair" in a university that shall be nameless, but, after all his plans, the thing he sat down in was woefully like a dunce's stool. No, no; the "pride of place" is all correct, but the "falcon" business glimmers in uncertainty. Indeed, I am not at all prepared to take *his* word for the "mousing owl;" the owl is not a carrion-eater, and it is something "rotten" in the "Homœopathic Text-Book of Surgery" that attracted its critic. Maybe a decayed *fish or* something like it for malodorousness.

As the editor of the *Medical Century* has evidently gone into editing as a business—virtue is never so much its own A. Ward as when it entails coupon clipping—it is a kindly charity to warn him against the rocks and shoals that may wreck his frail cockle-shell before the voyage is fairly begun. I will therefore remark that it is bad taste to impugn the motive of an adverse critic. The sole question is the *validity* of the criticism; if that rests upon a basis of absolute fact the motive is out of all challenge. A book that does not defend itself is indefensible by either author or editor. The editor of a trade journal may, indeed, throw dust into the eyes of sundry readers, but that is no misfortune, for such readers are just as well off without eyes; and so is such an editor.

But the ascription of an invidious motive to the critic has another and a viler aspect. When contributions are offered to the editor of such a representative work as the "Homœopathic Text-Book of Surgery" was proclaimed to be, they are nothing more nor less than *confidential communications;* and what of an editor that will violate them; that, overflowing with spleen, forgets what he owes to his position (he may not consider himself in debt to himself) as to brand a critic as "a rejected contributor!"

To solicit contributions to the *quasi* "Homœopathic Text Book" was an imperative need, and a stroke of business worthy of Chicago enterprise; but to betray the trust of an unsuspecting surgeon remained for a Chicago editor. What will be the result when he next turns to editing as a business? Or, in order to be accepted as a contributor to one of the Homœopathic crazy-quilt text books, must one first prove his fitness by beslavering some such business venture with fulsome praise?

The editor of the *Medical Century* and of the "Homœopathic Text Book of Surgery" may rest assured that both the ethics and the lasso of the cowboy are sadly out of place in this latitude, and that methods which may be *comme il faut* in Texas are not adapted to the effete civilization of the East. May he mend his manners, and if that be impossible, may his sore need make him a most successful borrower.

S. A. Jones.

Ann Arbor, May 5th.

REPLY TO DR. PATTON'S LETTER.

To the Editors of the New York Medical Times:

In your Montreal letter of this month Dr. H. M. Patton comments upon the position always maintained by the Times—that "a true physician is free to use physiological medicine in those cases where curative results cannot be obtained from the secondary working of drugs as now known." He asserts that, leaving out chemical and mechanical cases, those conditions which cannot be successfully treated by the secondary action of drugs "are very, very few." Failures to cure in this way, when cure is possible, he would attribute to either "lack of knowledge of the materia medica" or "lack of capacity to read aright the symptoms." And yet he strongly deprecates "a present judgment of the law of similars, believing that centuries will elapse ere it becomes a perfect system." Of course, no length of time will suffice to change a "law" into a "system." Evidently Dr. Patton here refers merely to "the development of similia," of which he says in the next sentence that the more thoroughly it is carried out "the less will medicine need the primary effect of drugs." But if, *even now*, conditions refractory to Hahnemannian treatment are extremely rare, and its failures in curable cases are due, as a rule, to the ignorance or incompetence of the prescribers, how much room for improvement is there in the "system?" Is it not already as near perfection as anything human can be? Dr. Patton seems to think that "the profession" ought to take up the work of "developing our materia medica" where Hahnemann and his immediate disciples left off, in order that exceptional practitioners like himself may finally be enabled to cure a "very, very few," of their patients by one kind of drug-action rather than by another. This would demand centuries of "human sacrifice," in the form of "heroic self-martyrdom"—which, I submit, would be rather a high price to pay for such results.

Your correspondent's concluding argument—against "dropping the name"—is perhaps the most surprising part of his communication. "Man," he declares, "is a bigoted animal, a cowardly animal, and force has always been a greater power in the world than gentleness." Has he completely forgotten the posological motto of his school, "die milde macht ist gross?" If so, let me remind him that were the "hammering process"—bringing to bear the overwhelming influence of "material success"—really the best method of establishing truth, Christianity itself would not now be "a power in the world."

May 15, 1896. Geo. L. Freeman.

A CORRECTION.

To the Editors of the NEW YORK MEDICAL TIMES:

The formula you published in my article in the last number of the TIMES was not correct.

Please publish the correct formula, thus:

℞ Balsam copaiba .... ℥ ss
Oil sandal wood .... ℥ ss
Oil cinnamon .... ʒ i
Emulsion acasia .... ℥ iiiss
Simple elixir .... ʒ iii
Sig.: A desert spoonful every four hours.

Yours, E. M. HALE.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

BIOLOGICAL SOCIETY.

M. Kauffmann has compared the nutrition and thermogenesis during early life in normal and diabetic animals. He has determined that in the animals that had been rendered diabetic experimentally the combustion is not increased; on the contrary, the azote and saccharine elimination are considerable argumented, which explains the loss of weight of the animal. It is the oxidization of the albumen that is especially exaggerated, all the other phenomena of combustion being retarded the most.

MM. Abelous and Biaries have investigated with the view to determine the oxidizing power of different organs, and have found it especially marked in the glandular organs in the spleen and liver. The nervous system, and even the muscular system, despite the large quantity of heat it produces, have but feeble oxidizing power.

M. Bourquelot presented an observation of M. Severeann of a case of poisoning by strychnine, successfully treated by sub-cutaneous injections of curare.

M. Lapicque has studied the action of diphtheritic toxine when superficially applied, and has decided that it produces the same lesions as when the liver is infected. Again, the liver does not appear to exercise a sensible action of fusion, for the animals injected by the vena portæ survive no longer than those injected by the veins of the ear.

ACADEMY OF MEDICINE.

Congenital Luxation of the Hip—M. Broca operated in thirty-seven cases of congenital luxation of the hip, with three deaths, which took place early after the intervention. When carefully conducted the operation is absolutely harmless. As respects the final result, only nineteen were old enough to be put in the line of reckoning, and there were three relapses. In sixteen other cases there was a solid nearthrosis; walking became easy and much less fatiguing, the stiffness diminished, and in two patients completely disappeared. After the operation, M. Broca, like Lorenz, replaced continuous extension by the plaster apparatus, but the preparatory extension renders great service in the old luxations of children of ten or fifteen years.

Professional Contagion of Cancer.—M. Guermonprer reported two cases, the first of epithelioma of the temple, the second an inguinal papilloma in physicians, which seemed to be due to a professional contagion.

Photography of the Gravid Uterus by the X-Rays.—M. Pinard presented the first case in which the photography of a gravid uterus by the X-rays, which was subsequently removed by autopsy and frozen, had clearly showed the position of the fœtus. Experiments upon fresh specimens showed that the tissues could be traversed immediately after death. These first results, due to MM. Varnier, Chappius, Chauvel, Funcke, and Brentano, are encouraging.

Treatment of Tumors of the Mouth by Chlorate of Potash.—M. Dumontpalier presented three cases of tumors, probably epitheliomatous, of the mouth, successfully treated with the chlorate of potash locally applied, and given internally in the dose of 4 grammes daily. The treatment should be continued for two or three months. It is necessary to be sure of the functional integrity of the kidneys, and to remove all causes of local irritation by dental tartar. M. Reclus recalled that his investigations had shown the real effects of the chlorate of potash in cutaneous epithelioma, and its inefficacy in the mucous form; the ameliorations are often ephemeral. M. Dumontpalier replied that one of his patients has been cured for eleven months. When employed with perseverance the chlorate of potash will often enable an operation to be avoided.

Of Appendicitis.—Upon this subject M. Dieulafoy made an important communication. The following are his conclusions:

1. Appendicitis is always the result of the transformation of the appendicular canal in a close cavity.

2. This transformation may occur at some point of the canal, the length and narrowness of which is so conducive to the transformation.

3. The transformation of the appendicular canal is made by different mechanisms which I have been able to establish by investigation of appendices that have been removed by surgeons. Often the partial obliteration of the canal, and its transformation, are due to the slow and progressive formation of an appendicular calculus, more or less hard, according to the inorganic matter, the salt of lime and magnesia, united with a quantity, more or less considerable, of the organic and stercoral matter of the calculus. This consists, not of a calculus coming from the cæcum, as has been incorrectly stated, but it is a veritable appendicular lithiasis, which I compare to a renal or biliary lithiasis.

4. By numerous examples I have been able to demonstrate the pathogenic similitude of these three lithiases, their coexistence in the same family, and the heredity of calculous appendicitis, and which I propose to associate with the patrimony of gout and arthritism.

5. In other circumstances the transformation of the appendicular canal in a close cavity is the consequence of a local infection, in every respect comparable to an obstruction of the Eustachian tube in a case of otitis, and to the obliteration of the biliary canals in catarrhal icterus. In fine, in some cases, the transformation of the canal is the slow and progressive result of a fibrous contraction, like that of the urethral canal. It may be added that many of these causes may be united in the same individual. The appendicular lithiasis and obliteration by thickening of the walls are often united.

6. The symptoms of appendicitis, whether mild or grave, slight or violent, do not manifest themselves until the transformation in the close cavity occurs. At that moment the normal microbes of the appendix, hitherto harmless, begin to pullulate and increase their virulence. Then there occurs here what has taken place in the remarkable experiments of Klecki after the ligation of a coil of intestine. From these experiments it is that I have endeavored to establish the theory of appendicitis from a close cavity—a theory confirmed by the experiments of Roger and Josué

7. In an appendicitis thus constituted there is elaborated a nest of infection, sometimes terrible, the principal microbic agents of which are the bacillus coli and the streptococcus, as my interne, M. Kahn, and myself have often proved.

8. The virulence of appendicitis is sometimes so great that the patient may die from the infection itself of the appendicitis, in the absence of the symptoms and lesions of peritonitis.

9. In other cases, the infection extends from the appendix to the peritoneum, the walls of the appendix not being perforated, yet in despite of the absence of perforation we see manifested every variety of peritonitis, the acute septicemia of peritonitis, general peritonitis, encysted peritonitis, remote peritoneal abscess and areolar abscess of the liver.

10. Finally, in cases which are considered the most classic, because they are the most generally known, appendicular infection terminates in gangrene, in perforation of the appendix, and the result is the evolution of the different varieties of peritonitis from perforation.

11. The medical treatment is null or insufficient. The only rational treatment is surgical intervention, practised at an appropriate time.

Intercricothyroid Laryngotomy.—M. Richelot declared that the ordinary tracheotomy in the adult is always a dangerous operation. Simple laryngotomy, easily performed in a minute and exposing no organ of importance to being wounded, should be substituted. A canula of 9 to 10 millimetres easily penetrates the inter-cricothyroid space and amply suffices for respiration. In cases of asphyxia, where the veins are swollen, the neck thick and short, laryngotomy is easy, and the only possible operation in such cases.

The Roentgen Rays.—M. Guyon exhibited photographs of renal calculus, and of the biliary vesicle obtained from the cadaver by MM. Chaput and Chaurel. M. Fournier also presented photographs taken by MM. Oudin and Barthelemy and showing first the integrity of the bone in an arthropathy connected with psoriasis, and second a metallic foreign body in a phlegmon of the hand.

The Plague in Asia.—M. Mahe reported the existence of the plague in three principal localities, viz: Arabia, Persia and Western China. The last was specially important, because it was neighboring to the French colony of Tonquin.

The Hydromineral Treatment of Angina Pectoris.—M. de Roux read a paper showing the utility of this treatment.

MEDICAL SOCIETY OF THE HOSPITALS.

M. Potain presented a case of interventricular communication without functional symptoms. The patient, a woman, reached the age of fifty-five, without disease of any kind. She had had three pregnancies, and nursed three children. She entered the hospital for dyspeptic troubles. It caused astonishment to find on ausculation the signs of interventricular communication of the heart. There was a considerable souffle with resonant sound at the internal part of the third intercostal space, intense murmur at this point, no particular propagation of it towards the vessels, no increase in the volume of the heart, regular pulsation. M. Siredey observed a patient in 1892, who in some respects resembled M. Portant's case. He was a young man of 19 years, and had entered for an acute febrile attack, which left him in a few days. Auscultation revealed a triple cardiac lesion, accompanied by no functional symptom. Autopsy confirmed the diagnosis of contraction of the pulmonary artery, persistence of the foramen of Botal and interventricular perforation. M. Rendu said it seemed that many congenital cardiac lesions manifested themselves without any appreciable symptom, for instance, the remarkable case cited by M. Barth of a patient whose heart was represented by a single ventricle, and who lived long without any special trouble.

M. Huckard: Anacrotism of the pulse in aortic contraction, its characteristics are dichrotism, at the same time in the ascending and descending aorta. It was found in the young and always with very contracted orificial stenosis. The two conditions seemed to be necessary.

M. Potain: Anacrotism of the pulse has not a single cause, and is not the exclusive result of aortic retraction, for it is met with in cases of insufficiency, and even when the orifice is normal. It is observed at the same time with the sound of the systolic galop, and, like the latterl is of arterial origin.

M. Catin thinks that the indications for the employment of injections of creosote are restricted and the contra-indications many. They are useful at the beginning of tuberculosis, and in the slow forms, but are not specific. M. Fernet: It is difficult to make a prognosis of tuberculosis, and to appreciate the value of treatment. Hygienic means alone are capable of producing a cure of tuberculosis of the slow form. Creosote produces certain irritations of the digestive organs, the circulatory and the nervous systems, but only in cases in which it is administered in suitable doses; beyond that it gives rise to phenomena of poisoning, an acute or chronic creosoteine, nor is it a bactericide, unless the blood contains a large quantity of it. In the nontorpid forms of tuberculosis, in alcoholics and arterio-sclerotics, it is contra-indicated, and in many individuals large doses are dangerous.

M. Handt, in the course of his experiments upon tuberculosis of the liver, has succeeded in proving that creosote causes the urobilin of the urine of tuberculous patients to disappear. Rectal injections appear to be the most active. M. Legendre: Before employing creosote for tuberculosis it may be used as a remedy for certain forms of dyspepsia, and thus become a valuable gastric adjunct. M. Hayem: This discussion has brought out three points: First, the action of creosote upon the digestive tube; second, upon the urobilin; third, the intestinal origin of urobilin. For a long time German physicians had employed creosote in affections of the digestive tube. It is certain, however, that in all tuberculous patients submitted to the creosote treatment gastric difficulties are the most profound. The remarks of M. Handt are very important, but it should not be forgotten that rest is often sufficient to cause urobilin to disappear. As respects the intestinal origin of urobilin, that is an old theory, and it should be remembered that it is more abundant in the healthy man, and urobilinuria is a physiological phenomenon.

M. Barrie: In most tuberculous cases, creosote administered by the stomach produces dyspeptic troubles. It should be administered by the rectum, in the form of suppositories. M. Ferrand: Creosote appears to act as an irritating agent. It is indicated in torpid infiltrations of the lung, without congestive reaction. It should not be employed when the tubercles are disseminated into small patches with a tendency to soften, and it increases active peripheric congestions in these patches. M. Manquat recommended as an injection an emulsion of creosote in milk, in the proportion of 10 per cent. M. Burlureaux was of M. Fernet's opinion. Creosote is not a specific, but an adjuvant, and should be handled carefully. Every patient that can support very large doses well must be cured. M. Siredey: This law has its exceptions. One of his patients who took with ease 2 grammes of creosote daily, succumbed to rapid tuberculosis. M. Faisans: It should not be concluded from the tolerance of creosote that its curative action is certain, and its universal use in all forms of tuberculosis should be disapproved. In some forms it is positively hurtful.

SURGICAL SOCIETY.

Serotherapy and Tetanus.—M. Broca added a fact negative of the treatment of tetanus by antitetanic serum. Although the injection was made immediately upon the appearance of the disease, death supervened. M. Delorme saw a case of acute tetanus which had been treated with the antitetanic serum by MM. Vaillard and Roux, and which died the same evening.

Abdomino-Perineal Method for the Ablation of Rectal Tumors.—M. Chalot, of Toulouse, made a permanent anus at the top of the iliac fossa. Then a portion of the tumor could be removed by the abdomen. At a second time the inferior extremity of the tumor was removed through the perineum. Unfortunately, the patient upon whom the operation was performed died on the night following. The important point of this method is the complete hemostasis that is secured from the first by tying the superior hemorrhoidal artery and vein, which permits the ulterior perineal extirpation to be easily effected. M. Quenu claimed for M. Gauthier the priority of this operative method.

Perineal Sigmoidostomy or Colostomy by an Abdomino-Perineal Passage in Cases of Congenital Imperforation.—M. Chalot observed a case of imperforation in a young female child. He commenced the operation by a perineal incision, but could not reach the ampulla. He then deliberately opened the abdomen, which gave access to the iliac sigmoid flexure, which he opened with the index finger, he then perforated the rectal cul-de-sac and forced the intestine through the perineal orifice; as the rectum was absent, it was the coil of the sigmoid that was attached to the integument. Hence he called the operation perineal sigmoidostomy. The patient was cured, and now in good health. M. Guinard exhibited a foreign body extirpated from the hand notwithstanding its exceeding smallness—a small needle—by the help of a photograph of the Rontgen process.

OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY OF PARIS.

MM. Doleris and Bonnus: Uterine rupture. The rupture occurred spontaneously in the course of a regular labor in a cachectic woman, and a subject of purpura. Head presentation, cervix very much altered, pelvic varicocele, absence of the usual signs of rupture. Patient died on fourth day from slow intra-peritoneal hemorrhage.

Clinical, Bacteriological and Experimental Researches Upon the Transmission of Tuberculosis From Mother to Child.—M. Bolognesi reported thirteen observations of tuberculous women who were delivered—the majority at the Hospital Cochin, the others at the Charity. He examined the placentæ of all and the organs of the fœtuses of many. The researches and experiences with the thirteen were barren and negative of results. In all the cases the placenta was examined, the blood from the umbilical cord and that from the placenta was investigated immediately after birth, and no tubercular lesions or Koch's bacilli were discovered. M. Bolognesi believes himself justified in concluding that maternal tuberculous heredity is a matter of predisposition and of aptitude, the mother delegating to her child an apt soil for bacillar development, and that makes it a fit candidate for tuberculosis. The infants of tuberculous mothers should not only be deprived of the mother's milk and nourished by a healthy nurse, but they should be isolated, or better still, removed from the domestic contagion to which they are usually exposed.

M. Porak examined the lungs of a child of a tuberculous mother, dead a few days after its birth. The histological examination showed that there was bronchial dilatation with peripheral sclerosis. He concludes that one should be cautious in affirming the existence of congenital tuberculosis. M. Charpentier remarked that the children of tuberculous parents are very large and vigorous at birth; he does not believe in the intra-uterine contagion of tuberculosis. M. Mace reported two observations of death supervening during labor in subjects of cardiac disease. The first was a woman in her fourth pregnancy, who had asystolic troubles; syncope ococcurred in the course of the labor, delivery was effected by the forceps, and it was impossible to revive the child. Autopsy demonstrated the existence of mitral contraction, with marked myocarditis. In the second case, syncope supervened also, but the child was revived and lived five days. In this case there was also mitral contraction, but the woman died of the syncope induced by acute œdema of the lungs, with double hydrothorax. M. R. Martin, on the influence of placental alterations upon the development of the fœtus, and upon its health during the ten first days after birth: The calcareous degeneracy of the placenta has no bad influence upon the development of the fœtus, nor on its health, and hereditary syphilis often loses much of its initial weight. From the researches of Durante in the Charity laboratory, the white patches of the placenta result from a primitive lesion of the villous coat, producing thrombosis, and the coagulated blood may become organized and become the seat of hemorrhages. These extremely common lesions are often connected with albuminuria, interfere with the development of the fœtus, and diminish its vitality.

FRENCH SOCIETY OF DERMATOLOGY AND SYPHILIGRAPHY.

Treatment of Syphilis by Sub-Cutaneous Injections of Mercurial Preparations.—M. Hallopeau: Injections of the soluble salts should be abandoned, because they are too painful to be practiced in sufficient doses. Injections of the fatty oils are less dangerous in moderate doses; injections of calomel are often very painful, and should be reserved for cases in which energetic intervention is urgently indicated for rebellious syphilitic manifestations. When other means have failed, they may be efficacious, and they may be replaced by supra-pubic frictions, which are very active. MM. Rey and Julien made a communication upon the treatment of syphilis in the dispensary of Algeria. In 1895 they employed exclusively injections of the insoluble salts of yellow oxide and calomel. Results were good; women were impatient to return on the day fixed for the injection.

From the observations of MM. Rey and Julien, the accidents disappeared more slowly with the use of the yellow oxide, and resisted this salt, but yielded to calomel. They prefer as a vehicle gum water, and the quantity of the salt injected did not exceed 5 or 7 centigrammes every fifteen days.

M. Lavarenne communicated the results of his researches upon injections of the oil of the biioduret of mercury—4 milligrames to a cubic centimetre.

M. Portalier reported upon the injections of calomel. He compared the good effects of these injections in true syphilitic accidents, and their lesser value in the para-syphilitic, tabes and general paralysis. They act particularly in tertiary glossites, cerebral arteritis and malignant syphilis, and are a valuablemethod for diagnosing doubtful specific lesions.

An extraordinary surgical operation has just been successfully performed at the University of Prague. Prof. Maydi opened the abdominal cavity of a young man of nineteen years, a student at the "Ecole Technique" of Brunn. From his infancy he suffered from an internal tumor that reached from the dorsal spine to the lower abdominal region. Between the vertebral column and the intestines the professor found the undeveloped form of a headless fœtus, but provided with extremities perfectly visible and thickly covered with coarse hair. He thought that this tumor was a twin child, which, for some unknown reason had become developed in the lower part of the body of the one that was really born. The young man, the subject of the operation, is to-day well and out of danger.

Phthisical Subjects Cured.—The political journals have been producing some excitement *apropos* of the decoration by the President of the Republic, on the occasion of his recent visit to Lyons, of an old survivor, of the "Grande Armée," who had reached the age of 103 years. This centenarian, at twenty-four years after Waterloo—and here is the cause of the general public amazement—was restored from confirmed phthisis. It would be difficult to cite many other examples of the cure of consumption. Goethe, who at nineteen years of age was pronounced to be irrevocably doomed, died at the age of eighty-one, after contributing to the glory of Germany. The first Napoleon was universally judged to be affected with grave thoracic disease at the time of the siege of Toulon. Brehmer, the great Brehmer, as he is called in Germany, and who founded, after unheard of struggles, the first sanitarium—that of Gobersdorff, in 1859—was phthisical at the time, and died in 1889. Dettweiler, who founded and directed with marvellous activity the sanitarium of Falkerstein, the first opened to the tuberculous poor, was the subject of phthisis. In France, and in the Academy of Medicine, it would be easy to cite five academicians, who are notoriously tuberculous. One may be named without indiscretion, for he made allusion himself to his malady, in his farewell lecture at the hospital "Saint Louis;" it was Dr. Pean. Declare, though disabled for a short time after his course as prosector of the hospitals, was sufficiently restored to attain to a high position in the ranks of surgery, and to manifest ability of the first order. In a recent statistical report Dr. Haufe, director of the sanitarium of "Saint Blasieu," published the results of an investigation made in 1891 upon the patients treated there during ten years. He obtained the following facts relative to phthisical patients who had left the sanitarium at various times. Forty-six did not respond, five died, twelve had a relapse after an interval of from three to six years, 201 left two years after, and for ten years did their work without cessation, all continuing to cough. Seventy-two may be considered as proved, for a time reaching from three to ten years. Among these last are six officers, who for many years—one of them for six years—have performed their military service without interruption. Some had symptoms of acute phthisis; others had been tuberculous for a long time, and had repeated hemoptysis.

THE PASTEUR INSTITUTE.

President, Dr. Roux.

The Bacillus of Typhoid Fever.—In 1872 Eberth found microbes in the spleen and glands of the dead from typhus. In 1884 Graffky succeeded in isolating them. After uniting them with gelatine, most frequently, or glucose, or upon potato, he obtained colonies of bluish spots. Under the microscope the bacillus presents the form of a small rod with round extremities and of various dimensions, according to age. He colored them by all the methods except that of Gram. The bacillus of Eberth has no spores, and dies at 70°. It resists acids, and according to Chantemesse and Widal has a characteristic affinity with phenic acid in strong doses. It exists in the bodies of typhics, but never in the blood. The typhic bacillus is pathogenetic for animals; mice are especially sensitive. It acts in animals either by a veritable infection—after inoculation of a culture of the typhic bacillus it is found in the majority of the viscera, or by poisoning, after inoculation of the toxine extract of the culture of the typhic bacillus; death is produced by intestinal lesions. Sanarelli succeeded in immunizing guinea pigs. Chantemesse and Widal made experimental applications for the treatment of typhoid fever. The chief agent for the dissemination of the bacillus of Eberth is water polluted by typhic stools. The search for the bacillus in the water and the stools is extremely difficult, and it has often been confounded with the bacterium coli. A great number of methods have been adopted in the researches. According to Perre, by diluting the culture and adding peptone and phenic acid, a medium would be had in which the typhic bacillus can only be evolved. J. A. C.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Collodion in Anal Fistula.—Dr. J. Garmell suggests (*Med. Age*) treatment of fistula in ano by pure collodion applied directly to the open wound. Though the application causes intense momentary pain, this is quickly succeeded by a pleasant, comfortable sensation. It contracts the parts, and acts as a protective beneath which healing takes place rapidly.

Ozone in Whooping Cough.—The *Bulletin Médical* reports twenty-two cases of whooping cough treated with inhalations of ozone. It acted immediately in diminishing the frequency, the length and severity of paroxysms; it shortened the course of the disease remarkably and the general health improved at once, although the cases treated were all severely attacked.

Silver Nitrate for Hemorrhoids.—A novel procedure for the treatment of hemorrhoids is recommended in a German publication. It consists in painting the nodules once daily with a 2 per cent. solution of nitrate of silver, which causes a gradual reduction in size without the least pain, In the cases reported the tumors had entirely disappeared in the course of one or two weeks.

Cancer of the Rectum Cured by Slippery Elm Bark.—Dr. George J. Monroe, Louisville, Ky., writes in the *Cincinnati Medical Journal* that he has had very favorable results from the following simple method of treatment. Fresh slippery elm bark, in water, was used as an injection, and as much of the mucilage drank as the patient could dispose of, the juice of a lemon being squeezed into each glassful, to make it more acceptable. Four advanced cases of undoubted cancer of the rectum are detailed, in which a complete cure appears to have been effected, the diseased tissue being almost or entirely absorbed. The writer concludes: "I believe in the use of the slippery elm. I think that in it we have an absolute cure for cancer of the rectum. I have no reason to offer why it produces these favorable results. All I claim is, that I know *it does.* * * * I do not know it to be a specific for rectal cancer. I do not ask anybody to endorse my ideas without trial. I would respectfully ask my friends to make use of the treatment in rectal cancer and report results."

The Sand Bath as a Cure.—The Mohammedans, in their ablutions, replace water by sand when needful. This religious practice has, it appears (*Cosmos*), became an element of modern therapeutics. At the reunion of Swiss physicians, held last year at Ouchy, Dr. Suchard read a paper on the sand bath. Invalids have been completely or partially cured by sand heated to a temperature varying, according to the cases, from 45 to 60 degrees centigrade. The sand, containing air between its particles and being a bad conductor of heat, transmits it in a gentle and almost insensible manner. Respiration is favored up to the point where a patient may lose two quarts of liquid in one sand bath. Thanks to this evaporation, the invalid may support continued high temperature without the actual temperature of the body rising more than a few degrees, and this without fear of heart affections, if care be taken to put hot sand on the feet at the outset. The number of ailments that may be treated by this powerful curative agent is considerable. In the first place, it is especially beneficial to chronic rheumatism and to gout. Neuralgia and sciatica are cured or benefited by local or general baths. The most varied organic troubles of the nervous system, cardiac or digestive affections, have been treated by this method, sometimes with remarkable success. The same is true of tuberculous affections of the bones and joints. The account given by Dr. Suchard contains statistical tables relating to more than 100 patients annually.

Thymus Serpyllum in Pertussis.—Dr. Sidney B. Straley reports in *American Doctor*, the results of the use of thymus serpyllum in pertussis. He used a tincture made from the green drug. His conclusions are:

1. Thymus serpyllum is a specific for pertussis.
2. It acts in any stage of the disease.
3. It is also a nerve sedate and gastric stimulant.
4. It is necessary to use the green plant.
5. It is perfectly harmless in doses as large as a teaspoonful of the tincture for a child of eight years.
6. The action is fully established in twenty-four hours and completed in five days.
7. Lastly: Indications are that there will be no recurrence subsequently, at least, not more often than in cases which run the full course.

Turpentine as a Remedy for Mumps.—Dr. C. M. Holden, Windsor, Vt., in the *Massachusetts Medical Journal*, gives it as the result of his long experience, that turpentine, in the usual doses, according to the age of the patient, is a specific against mumps. The patients quickly recover, without metastasis to other organs.

Therapeutic Value of Oxygen.—Dr. James W. Russell (*Birmingham Med. Rev.*), after extensive experience in the use of oxygen inhalations, concludes that the administration of this gas "is rational treatment when there is a deficient entry of air into the lungs. It is only valuable in such cases."

MacAlister has reported, in the *Lancet*, a case of uræmic coma and one of morphine poisoning, in both of which recovery was apparently due to the administration of oxygen by inhalation. The first case occurred in a man, thirty-nine years old, who, in addition to albuminuria and diminished secretion of urine, presented œdema, vomiting cyanosis, loss of vision and derangement of consciousness, progressing to coma. Improvement speedily followed the introduction of pure oxygen through a rubber tube introduced into one of the nostrils, and eventually led to recovery. In the second case, a young woman had taken in rapid succession eight pills, each containing half a grain of morphine. The usual measures had been employed—mustard to the calves and chest, atropine, artificial respiration—but consciousness remained in abeyance and the corneæ insensitive, while the breathing was shallow and infrequent, and the surface became cold and cyanotic. The vulcanite tube connected with the oxygen receptacle was introduced into the pharynx and the gas permitted to enter, artificial respiration being meanwhile maintained. Improvement was soon apparent, and slowly continued, until recovery was assured.

An Italian physician recently reported the case of a man who had suffered from diabetes for two years. After a trial of other methods without success, oxygen inhalation was employed, the patient taking an average of forty-five gallons of oxygen daily. The urine began to diminish in a few days, and in less than two months the sugar had entirely disappeared. The patient improved in weight, and in two or three months was pronounced entirely cured.

RETROSPECTIVE DIETETICS.

Concentrated Milk.—A writer in the *British Medical Journal* has called attention to the value of concentrated milk in certain forms of diarrhœa and in wasting disease, and especially in cases in which the patient is unable to take other nourishment, and cannot take a sufficient amount of milk in its ordinary diluted form to meet the demands of the body. Concentrated milk is prepared by evaporating the milk in a porcelain dish over some suitable heating apparatus, care being taken to see that the liquid does not boil and to stir it continually. By this means cream is prevented from rising, and the evaporation is not delayed by the formation of a scum over the surface. With proper apparatus and attention, milk may be reduced to one-half its volume in one hour.

Infant Feeding.—Dr. Cheney (*Occidental Med. Times*) believes that mothers usually feed their babies too often. At first the interval should be about one and a half hours; at six weeks give food every two hours; three months at every three hours; at six months, give every four hours, and keep that interval from then on. As to the manner of feeding, he says we have all seen failures in infant feeding, not due to quality, quantity, or irregularity, but caused by bolting the food. We cannot do so ourselves without suffering thereby. The baby is usually given the bottle and literally "swills" its contents down, a whole bottleful, which is the source usually, of the indigestion. The nurse or mother should handle the bottle and allow the baby fifteen minutes to drink what may be in it.

Artificial Milks Deleterious.—The Paris correspondent of the *Medical Record* deals with this subject as follows:

Sterilized milk, maternized milk, pasteurized milk and phosphatized milk are pompous and high-sounding names with which dealers in the lacteal fluid stamp their wares that are recommended as substitutes for natural human milk. Injustice and often injury are done, not only to the child who is nourished by them, and who certainly has a right to its mother's milk, but also to the mother herself, who is only truly such when she carries and nurses her child. These are laws of Nature which it would be well to promulgate afresh and emphatically, because they are beginning to be forgotten since numberless interested advertisements, unfortunately often coupled with medical advertisements, are constantly appearing in print, vaunting the merits and advocating the superiority to mothers' milk of sterilized milks, maternized milks, phosphatized milks, naturally or artificially prepared. The public, led into error by reading these artfully prepared notices in the daily press or lay-medical and health journals, end by believing that mothers' milk can be thus easily replaced, and without serious objection.

This substitution is nevertheless highly deleterious, and it is a crying injustice to deprive children of their mothers' milk under the fallacious pretext of substituting therefor pasteurized milk. Pasteurized milk, that is to say, cow's milk passed twice to a temperature of more than 60° C., evidently no longer possesses, after the coagulation of the albumen and a part of the casein, the properties of a good, digestible and sound milk. It is well-known that children brought up on such milk are more delicate and less well-developed than those nursed by their mothers. It is true that some succeed in overcoming this scanty nourishment and thrive in spite of the insufficiency of nutritives when they are of an unusually good constitution and come of remarkably strong and healthy parentage. But many fade and those that do not die grow up delicate or sickly when they might have been vigorous and well-developed with their mothers' milk.

Maternized milk, a happy name with which to baptize a new production, is simply cows' milk which is modified by the action of cane sugar upon the casein contained therein and thus made to resemble more or less mothers' milk.

Another method of maternizing milk is to add to cows' milk a certain quantity of artificial serum, composed chiefly of salt and water. Phosphatized milk is obtained by the addition of the phosphate of soda to cows' milk in the proportion of from fifteen to thirty grains to the litre. Sterilized milk obtained by heat is but another name for pasteurized milk of which we spoke above. All these are pretexts for foreign nourishment, and it is the duty of every physician to oppose vigorously the generalization of such deleterious substitutions; the more so at the present time, as the warm months are at hand, and the first and second summers of infancy are the ones in which there is the greatest mortality from infantile diarrhœa, cholera infantum and athrepsia.

The Treatment of Epistaxis.—Gillette says that in epistaxis the use of hydrogen dioxide (per oxide hydrogen) with any suitable syringe, will be followed by very gratifying results. Use a teaspoonful or more of the remedy in full strength, and the relief will be immediate. In operations in the nasal cavity, when bleeding obscures the vision, inject the hydrogen dioxide, ask the patient to blow the nose, and the field is clear again.—*Brit. Med. Jour.*

The Cornell Brain Association.—This singular association apparently has for its object the *post-mortem* study of the effects on the human brain of education and good morals. At least we learn from the daily press that Dr. Wilder, of this association, has made another appeal to educated and moral persons to bequeath their brains to the institution for scientific study. In response to this letter the society has already received eight brains, and has the promise of twenty-five others, which are as yet being used by their owners. These latter include the brains of Thomas K. Beecher, of Elmira, and Mrs. McGee, daughter of the astronomer, Simon Newcomb. Apparently no brains of immoral or uneducated persons can be used by the association, though it would seem that a few of the latter classes might prove of advantage for purposes of comparative study.—*Boston Medical and Surgical Journal.*

The Pineal Body.—In *Popular Science News*, for October, Anna Hinrichs presents an illustrated article on the comparative anatomy of the pineal body. Her thesis is, that this body or "gland" is the rudimentary third eye of man and all vertebrates. The central point of our brain, which so long has remained a mystery to the student of human and comparative anatomy, now appears as the rudiment of a third eye, overgrown and depressed by the immense development of the brain. In other words, at the expense of a third eye, man has secured his brain, the organ of intellection. This discovery is not only very interesting, but also remarkably instructive, since this rudimentary third eye of man was looked upon by Descartes as being the seat of the soul.

"In closely examining the skulls of certain lizards, it was found that near the top of the head, under the dark opaque skin, and often in the very bone, an almost perfect eye exists, though no ray of light ever could reach it. Such an eye is represented in the upper figure of this cut. This eye shows a crystalline lens, a retina of very complex structure, and an optic nerve; in fact, all the essential parts of a perfect eye. But, being covered by the opaque skin of the animal, it is absolutely useless. If this optic nerve is traced to the brain, it is found to connect the eye with the so-called pineal gland of the brain. This pineal gland is in no sense of the word a real gland, but a definite portion of the nervous tissue of the brain, invariably located just back and partly over the cerebrum, and in front of the rounded brain mass which generally is considered to correspond to the corpora quadrigemina in man."

It is probable that this third eye was, at an earlier stage of development, not rudimentary, but in constant use. A moderate modification—namely, a transparent integument—would suffice; this is exactly the condition of the normal eyes in reptiles to-day; the skin covers them, but it is transparent where it passes over the eye. In the skulls of some of the gigantic reptiles of the earlier age of this globe, paleontologists have long ago found a large, round perforation. Probably this was the socket of the third or pineal eye of the ichthyosaurus, the plesiosaurus, and the labyrinthodon. But a much more important conclusion must be drawn from this discovery; namely, that in all vertebrates, even including man, the traces of this third eye remain to this day. The pineal eye of lizards being connected with the large pineal gland of the same, it would seem that the pineal gland itself is but the nerve center or optic thalamus for this third eye. In all reptiles and amphibia the pineal gland is large; so it is also in fishes. In the higher vertebrates, the cerebrum develops very highly, overgrowing the posterior portions, under the influence of which preponderance of the cerebral mass the pineal body is more and more repressed into rudimentary forms. But it remains with obstinate pertinancy. It is even always present in man—though here only the size of a pea, and rudely resembling a pine cone in shape. It seems also degenerate in structure, having hardly any nervous tissue. These facts of form and structure have given rise to its name, that of pineal gland. The position of the pineal gland in man is almost in the very center of the brain. The pea-like rounded mass attracts attention when the third ventricle of the brain is opened. It is almost free, being held in place by two light, stalk-like bands or peduncles, which connect it to the cerebrum anteriorly. The gland, so-called, is rather vascular, and contains, also, crystalline mineral matter, the so-called *acervulus cerebri*, consisting mainly of phosphates.—*Jour. of Am. Med. Ass'n.*

The Employment of Europhen in Venereal Practice.* — (By Dr. Carl Kopp, of Munich.) At the beginning of this year, I made a number of experiments with Europhen which proved so satisfactory that when an opportunity presented itself in the spring, I repeated them on a much more extensive scale.

It is my intention in this communication to record my experience with the use of Europhen in venereal practice, although it has given me good service in a variety of other diseases, as in several cases of paronychia, in ulcers of the leg, as well as in the management of simple wounds. The observations recorded below relate to nineteen cases of chancroids, to nine cases of inguinal bubo, in two of which after spontaneous opening the wound became converted into a large typical soft chancre; and to seven cases of moist papules in the genito-crural and anal region.

I. Chancroids.—Among nine cases of typical chancroids I employed curetting of the ulcers as recommended by Petersen in five instances. This procedure can be readily carried out under an anæsthesia. The resulting wound surfaces, which bled quite copiously, were dried and compressed with sublimate gauze until the hemorrhage had ceased, when a dry dressing of Europhen 1 part. and finely pulverized boric acid 3 parts was applied. Under this crust prompt healing occurred in all cases, once on the fourth day, twice on the seventh, once on the tenth, and once on the eleventh day. In one of these cases, four days after curetting a painful swelling of the inguinal glands ensued, going rapidly on to abcess formation, and demanding incision of the softened glands. Healing of the resulting wound took place in seventeen days. In the remaining fourteen cases of chancroids, the ulcer and its surroundings were thoroughly cleansed with sublimate solution 1 to 1,000, dried with cotton and then covered with Europhen in substance, or mixtures of Europhen with boric acid, equal parts, or sometimes in proportions of 1 to 3 or 1 to 5. The application of this powder was repeated two or three times daily, each application being preceded by a brief cleansing of the ulcers with sublimate solution. The period of healing under this treatment varied from six days to five weeks, amounting on the average to seventeen days, and occupying about the same time as the iodoform treatment of chancroids. The mixture of this preparation with boric acid was employed chiefly for reasons of economy, in order to determine whether, in view of its somewhat high price, smaller quantities of Europhen could be successfully utilized. I found that mixtures as dilute even as 1 to 5 were extremely effective. Signs of irritation from the use of the pure preparation were never observed. In order to insure efficiency it is of importance that—as emphasized by other writers—the powder be brought in contact with moist secreting surfaces. Under this method of treatment the occurrence of inguinal bubo cannot be always prevented. Among the fifteen cases above mentioned, a suppurative lymphadenitis inguinalis on the right side occurred in one case, which, after being opened, healed in about three weeks.

II. Buboes Resulting from Chancroids.—Of the cases of bubo treated with Europhen, two are of especial interest, in which the glandular abscesses, which, at the commencement of treatment, had been partially emptied by spontaneous opening, became converted into chancroidal ulcers of large dimensions. Whether this was due to secondary infection of the resulting wounds by the secretion of the still existing chancroidal ulcers in the genital region, or whether there were present ulcerating buboes from the start, the virus being transmitted to the glands through the lymphatics, cannot be decided. The possibility of the latter occurrence seems, in my opinion, not excluded, although contrary to the views of Strauss and others. In both cases the still existing chancroidal ulcers, as well as the cavities of the buboes, were curetted; the ulcerated margin of the buboes removed with the sharp spoon, the projecting flaps of skin and fragments of tissue excised with forceps and scissors, thoroughly disinfected, and a dressing of Europhen and boric acid, 1 to 2, applied. The reaction was slight; the dressing, which was changed on the third day, was only moderately saturated with blood and serum; the ulcerated character of the glandular abscess had disappeared, and under continued use of Europhen and boric acid the cavity of the bubo closed in respectively sixteen and twenty days. In seven other cases of sympathetic inflammation of the inguinal glands, with suppuration, the abscesses were opened, scraped out, the bleeding arrested, and after disinfection with sublimate solution the wound cavity was plugged with tampons impregnated with Europhen boric acid powder, 1 to 5. According to the existing conditions, the wounds healed completely during a period varying from fourteen to thirty-two days, the surroundings never exhibiting inflammatory reaction and the secretions remaining constantly odorless. Persisting fistulæ failed to occur in a single case. I mention these cases simply for the purpose of illustrating the perfectly unirritating character of Europhen even employed in large quantities, without desiring to assert that the same odorless dressing result could not have been secured from the application of other odorless dressing powders.

III. Moist Papules.—Of course, by the application of Europhen to moist papules only a local palliative effect was intended. We tried in seven cases before instituting constitutional treatment with mercury to convert the hypertrophied and profusely secreting papulæ latæ in the genito-anal region into dry form, and bring about cicatrization by application of a mixture of Europhen and boric acid, 1 to 3. By separating opposing surfaces of skin by means of layers of cotton this was effected in a satisfactory manner, but the result of this treatment, in point of time, seemed to me inferior to those obtained from the Labarraque method, ordinarily employed by me. The cicatrization of the papules in the experimental cases occupied from three to ten days.

From what has been said above, I believe that Europhen can be recommended especially for the treatment of infectious venereal cases, after curetting of the ulcers, as a substitute for iodoform. In other cases of specific and non-specific ulcerations it is useful, but not indispensable.

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* Translated from *Acrztlicher Central-Anzeiger. No. 27, 1895.*

Dr. Baer teaches (*Philadelphia Polyclinic*) that *the curette* is used entirely too much, immediately after labor. Blood-vessels that Nature has closed are opened by its use, thus destroying the structures which have been formed for a distinct purpose, and defeating that purpose.

Of course, if there is anything in the uterus which ought to be removed then the curette may be of service.

It is his experience that those practitioners who use the curette and irrigation constantly have more trouble than those who do not.

In Endeavors to diagnosticate *sex of a fœtus in utero* by the difference in the heart-sounds, Dr. Wells, of the Obstetric Clinic, (*Philadelphia Polyclinic*) considers that the character of the cardiac pulsations is of as much importance as the difference in the number of beats. It has been his experience that the sound of the male fœtal heart as heard through the mother's abdominal wall gives not only a fewer number of pulsations to the minute, but the heart sounds are stronger, rather longer in duration and of lower pitch. The type of sound comes slightly nearer to the adult type. In female children the pulsation are rather more rapid, weaker and of a higher pitch, resembling almost exactly the sound of the ticking of a watch heard through a soft feather pillow.

Santini's Hydatid Resounding or Booming as a Diagnostic Sign of Multiple Hydatid Cysts.—Dr. Santini, in a monograph "On Combined Auscultation and Percussion in Hydatid Cysts," states that on percussing a hydatid cyst whilst auscultating it with the stethoscope a special sound is heard. This is decribed as a sonorous booming (*rimbombo sonoro*) of a low tone, brief, and ending in a rapid manner. To further illustrate it, the author compares it to the sound obtained on percussing a membrane stretched on a metallic frame.

Dr. Thomas Fiaschi (*Australasian Med. Gazette*, Aug. 20, 1895) considers this new sign a valuable addition to the semeiology of hydatid disease, and may be the means of preventing many useless exploratory incisions. A further practical application of the sound, not mentioned by Santini, but obvious to anybody, is that it enables you to diagnose single from multiple cysts. In single cysts you get the hydatid-resounding uniform in tone, no matter on what point of the tumor you percuss. In multiple cysts, however, as soon as you percuss on a point of the tumor not covering the cyst over which your stethoscope is pressed, you get a sound having all the characters of hydatid-resounding, but different in tone from the one obtained by percussing the cyst over which your stethoscope is pressed. Thus, by percussing all over the area of the tumor, and changing the position of the stethoscope, you can judge, not only whether there is a single or a multiple cyst, but also the number of cysts composing the latter. As a practical example of this method, Dr. Fiaschi quotes the case of a boy which came under his care three months before. "He presented a large globular swelling in the epigastrium, to the right of which were two other small swellings. To all appearances the swellings were due to a hydatid cyst. It was, however, doubtful whether the cyst was single, with some depressions in it, due partly to the round ligament, partly to adhesions, or multiple. No marked fluctuation was present, the walls of the cyst being very tense, and on pushing the cysts about they moved altogether, so that no definite information could be obtained. On auscultating the percussion sound, I got the hydatid booming in all three of the projections, but when I tried to auscultate one cyst and percussed the other, I got a note similar to the booming but quite different in tone from what I obtained when percussing and auscultating the same cyst. As this difference was constant over all the three projections, I came to the conclusion that the cyst was multiple, and composed of no less than three cysts. On operating a few days after I found my surmise correct, for there were three cysts, with the addition of a fourth one on the convex surface of the liver.

"Considering the great difference in the prognosis of a multiple from that of a single cyst, I think this application of Satini's hydatid-resounding worthy of notice, and I recommend it for study and further development."

Diseases Which May Simulate Pleurisy.—A writer in "an American contemporary," as quoted in the *Medical Times*, groups the diseases which simulate pleurisy with effusion, thus: (1) Diseases of the pleura, excepting hydatid cysts. These are rare, the only one mentioned being a case published by Ouliment, in which cartilaginous degeneration of the pleura gave rise to dullness, broncho phomy and absence of vibrations in such a way as to make the diagnosis of pleurisy seem clear, and it was only at the autopsy that the true condition was discovered. (2) Diseases of the lungs. Under this group are included pneumonia with bronchial obstruction (in which the temperature often forms the only guide), "spleno-pneumonia" (a disease which we hear of for the first time, and which is, according to Graucher, a pulmonary congestion whose symptoms resemble those of pleurisy); hydatids of the lungs and pulmonary carcinoma. (3) Diseases of the mediastinum, among which it is stated that both cysts and aortic aneurism have been mistaken for pleurisy. (4) Diseases of the liver, especially hydatid cysts when they encroach on the thoracic cavity. Error of diagnosis here can only be avoided by carefully tracing the limits of dullness. Hepatic carcinoma has also given rise to a false diagnosis. (5) Diseases of the kidney, mention being made of one case of perinephritic abscess which closely simulated pleurisy.

Concealed Tuberculosis.—In the *N. Y. Medical Journal*, Aug. 10, 1885, Dr. R, K. Rachford gives the prominent symptoms of glandular or concealed tuberculosis, as it occurs in children or youths to the age of twenty. As this affection is curable, and when recovered from affords immunity against pulmonary tuberculosis later in life, we give the symptoms below.

1. Family history of tuberculosis.
2. History of exposure to contagion in infancy or early childhood.
3. Pronounced anæmia without apparent cause.
4. Irregularity and early appearance of the menstrual function.
5. A scant and pale menstrual flow, followed by leucorrhœal discharge.
6. Dyspnœa and pain in the side on slight exercise.
7. Proneness to catch cold.
8. Abnormal dwarfishness of the body.
9. Progressive failure of the health.
10. Neurotic disease, especially incontinence of urine. Sixty per cent. of his clinical cases with incontinence are tuberculous, and 45 per cent. of the neurotic cases are tuberculous.
11. Dyspepsia, associated with chronic diarrhœa or constipation.
12. Enlargement of external lymphatics, accompanied by pronounced and inexplainable anæmia.

Practical Points in Anæsthesia for Plastic Operations About the Eye.—Dr. M. W. Zimmerman thus concludes an article in the *Journal of the American Medical Association*, October 19th (*Daily Lancet*):

1. Plastic surgery about the eye demands complete and prolonged anæsthesia, with the minimum of risk to the patient, and which can be induced without impairing the life of the tissues or infecting the wounds.
2. Ether, among general anæsthetics, best meets these demands. The method of administration should be simple, cleanly, and avoid encroaching upon the field of operation.
3. Cocaine is the only suitable local anæsthetic. For the conjunctiva it may be applied to the surface in two to four per cent. solutions. When the skin is involved, subcutaneous injection becomes necessary. The punctures should be few and the dose not exceed twenty-five grains.

MISCELLANY.

—Oil of sassafras will destroy pediculi and their ova.

—How curious it is to talk of doctors paying visits. Everybody knows that the visits pay the doctor.

—The "X" rays have been found to exert a strong depilatory action, without causing pain or other indication of disorder.

—In this city it is estimated that there are about 15,000 persons at all times suffering from consumption, of which 5,000 die yearly.

—Cohn says a single germ could, under good conditions, multiply in three days to 4,772,000,000,000, and make a mass weighing 7,500 tons.

—It is said that the tendons found in the tail of a dog make better sutures than either catgut or kangaroo tendon, when properly prepared in sublimate.

—Dr. Burggraeve, Professor of Medicine in the University of Ghent, and founder of the Dosimetric System, is ninety-nine years old. He drinks and smokes.

—The City of Odessa has voted an appropriation of nearly half a million dollars for the establishment of a medical faculty in connection with the university of that city.

—Instead of putting foreign substance, "black salve," vaseline, ointment, or linament of any kind, upon a fresh cut, cleanse the wound, then tie it up neatly in its own blood.

—Dr. William Sprague, of Coldwater, Mich., has just celebrated his ninety-ninth birthday, and is still an active man. He has practiced his profession for over half a century.

—Every fatal case of typhoid, says the editor of the *British Medical Journal*, is, in fact, a violent death, an example of water poisoning, and should be the subject of sanitary inquest.

—Prof. Kohler, Imperial German health officer, has found in the cases examined by him symptoms of tuberculosis in the body of every third person who died between the ages of fifteen and sixty.

—The female medical students in India have been presented with a hotel, which is to be used as a residence for them during term time. An Indian official has given 25 000 rupees to the fund for its support.

—The working men of Birmingham, Eng., have endowed the hospitals of that city with a sum amounting to nearly two million dollars. In this good work they stand alone, no other city working population having done so.

—The *Post-Graduate* says: "This is not an age for reading books in medicine. What men who have graduated, and who have a thorough fundamental knowledge chiefly want, are cyclopædias and dictionaries and journals."

—The youngest member of the French Academy of Medicine is Dr. Raphael Blanchard, aged thirty-nine years. He is regarded as an uthority on the parasitic diseases of man, and is now engaged upon an important zoological work.

—Dr. Sanchez de Silvera (*Lo Sperimentale*) asserts that healthy infants never dribble. The latter condition is due either to disorders of the digestive apparatus or to obstruction of nasal respiration, but is altogether unconnected with dentition.

—A census of centenarians recently taken in France, gives 213 persons of 100 years or over, 147 of them women and 66 men. The oldest was a woman who had just died at 150, in a village of the department of Haute Garonne. Nearly all the centenarians belonged to the lower ranks of life.

—A French medical paper prints what is believed to be the oldest medical recipe. It is for a tonic for the hair, and its date is 4000 B. C. It was prepared for an Egyptian Queen, and required dog's paws and asses hoofs to be boiled with dates in oil.

—At a village in Georgia, Dr. A. Q. Rhett, with an instrument of a similar name, scraped out the uterine cavity of a patient, and in a short time she aborted. (Didn't know it was loaded). Dr. Bledso had to be called in to assist in arresting the hemorrhage, she bled so.

—The *Charlotte Medical Journal* calls attention to the dirty habit of wiping a clinical thermometer upon handkerchiefs, bed clothes and towels, and then carefully replacing it in a case upon cotton which is never changed. Physicians are themselves carriers of disease germs.

—Opposition to the use of antitoxin treatment for diphtheria has already taken an organized form in England. A deputation, headed by Lord Coleridge, has protested to the authorities against its use in the hospitals, on the ground that "public money ought not to be devoted to experiments in psychology."

—According to the *Druggist's Circular*, the word "bike" is now given official standing in our language. The man who looks after the wheels—not the ones in their heads—of the royal family of England, is the "sergeant bikeman." The Queen conferred the title, and she ought to know her own English.

—A woman physician who died recently in Colorado' bequeathed her body for dissection to one medical college, and half her wealth (which was considerable) to another. Her husband is reported to have complied with her wishes in the former case, and, presumably, had to give up the money also, though about this we are not informed.

—The *Coimbra Medica* denies the statement that has been going the rounds of the press, to the effect that the Queen of Portugal has been studying medicine, and lately received a diploma to practice. The report was probably based on the Queen's interest in various medical institutions, of which she is an influential and appreciative patroness.

—A Liverpool physician makes a portable spirit lamp out of a thermometer case, by simply fitting it with a few strands of lamp cotton and then filling with spirits. Screw on the top and place a piece of rubber tubing over the joint, making it spirit tight. Good for sterilizing needles. A suitable companion to Pavy's urinary test case and for other purposes.

—It is said that Mme. Audriffred has given to the Paris Academy of Medicine a sum equivalent to $160,000, on condition that the same be securely invested and the income be paid yearly to the man who discovers a specific remedy for consumption, whether a Frenchman or a foreigner, when it can be definitely decided that such a remedy has been discovered.

—The *Journal of Medicine and Science* remarks concerning vaccination, that the opponents of this most beneficial measure have only to enter Italy and witness the frequent outbursts of smallpox, and its ravages among the rural population, to be taught a lesson of its value. Blindness from smallpox, almost totally stamped out in England, finds frequent victims still in Italy, where vaccination is only done sporadically among the country people.

—M. Daremberg, of Lyons, France, has found the exclusive use of phosphated milk of value in the preventive treatment of tuberculosis. He reccommends the use of goat's milk as follows: Phosphated milk can be obtained by making a goat absorb a daily dose of twenty grammes of powdered calcined bones mixed with ten grammes of seasalt and combined with bran, barley or oatmeal and crushed carrots. In this way the phosphates are assimilated by the animal and supply the child with a reconstituent form of food.

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ORIGINAL ARTICLES.

PROSTATIC ENLARGEMENT OR HYPERTROPHY; ITS CAUSE, PREVENTION AND TREATMENT, REMEDIAL AND SURGICAL.

By Bukk G. Carleton, M. D., New York.
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FOR years the medical world has believed and never doubted that prostatic hypertrophy was a result of advancing years, and that old age was its only cause; that it probably occurred in all who lived beyond the fiftieth year. It was also believed that those who escaped the misery of an enlarged prostate were fortunate in that the lateral and not the so-called median lobe was involved; or, from some cause, the hypertrophy was small in amount and consequently caused little disturbance of the urinary functions.

Late studies of this organ, which we must consider largely a genital, although to a small degree it is a urinary organ (and when its normal balance is disturbed in a genital sense the urinary relations are unbalanced, and consequently much pain, annoyance and sympathetic disease), compel us to discard entirely age as the one and only cause, and to recognize advanced life only as a factor in the result. In other words, life has been sufficiently prolonged to allow of the development of the condition engendered by conditions and indiscretions of very early or adult life. There are no cases on record where the hypertrophy of the prostate has developed after the seventieth year, even when many years have been added to the three score years and ten, when the prostate was in a healthy condition up to this period. This is a strong point against age being the cause, but reason does not allow us to believe that Nature has singled out any one organ and one only to increase its size with declining years, while at the same time all the other organs and tissues of the body are undergoing atrophy. There is no doubt in our minds, from a very careful study of many cases in private and public practice and the literature on the subject, that everything that tends to increase the function or produce active or passive congestion, transitory or chronic, of the prostate, will necessarily increase the glandular, tubular, inter-muscular and cellular tissue growth, and will in time lead to true hypertrophy, which would not otherwise have occurred had a normal condition been maintained.

The principal causes of this condition are perverted sexual acts, habitual sensual indulgence and unchaste thoughts. If the mind or body or both are not in a proper moral condition we cannot expect to find healthy organs.

Next come imperfectly treated posterior urethral inflammations (simple or of bacterial origin), evidence of which is recognized readily by the shreds of epithelium seen floating in the urine, and strictures acquired or congenital.

The third series of causes are abnormal functional activity of the testicles; as in the female over-activity of the ovaries is liable, in those who do not bear children, to lead up to, if not cause, uterine fibroids.

It was formerly taught that prostatic enlargement, unless of acute inflammatory or suppurative nature, or caused by tubercular or similar growths, never occurred before the fiftieth and rarely before the fifty-fifth year of age; yet within the past few years many well marked cases of enlargement of the prostate have been reported in medical journals, and I have seen in private practice cases in which the overgrowth was well marked in patients of forty to fifty years of age.

The question now occurs, that if the cause dates back to childhood or young adult life, why so long a period was required to produce such results or for the disease to announce itself? This question can be answered by the knowledge we possess that the parts rebel against tissue changes; in other words, that these tissues or parts are slow in proliferation and development. For the same reason stricture of the urethra rarely assumes an inodular character in patients under forty years of age, and many are the cases where there are no symptoms or inconvenience for twenty or twenty-five years after the subsidence of the intense inflammation of an acute urethritis.

Time prevents a full discussion of the causes presented. Many other conditions might properly be added to the cause of this most serious lesion that appears in the declining years of man's life.

Prevention.—This must be commenced with birth and continued during life; having always before us the well known fact that if Nature's laws are violated the penalty is always exacted.

I am of the opinion that physicians cannot be too careful in properly aiding Nature, and where, in some part, from an inherent defect in the maternal or parental tree there is a deformity, however slight, it should receive due attention. In other words, it should be the duty of all physicians attending the entrance of male children into the world to carefully examine the prepuce, and before discontinuing the visits upon the mother to strip back the prepuce and thoroughly expose the glans, corona and sulcus behind it. When adhesions of the preputial surfaces are present they should be broken up; if smegma behind the glans is found, or if at a future time evidence of its presence appears, it should be removed and measures taken to keep the parts clean. When the prepuce is abnormally long, or becomes so after the stripping of the glans, or the præputial opening is abnormally narrow, the child should be circumcised. The meatus urinarius should also receive attention, and if there is evidence of overgrowth of the mucous membrane at this point, sufficient to obstruct the urinary stream, it should be properly incised, but not indiscriminately and without care and judgment, thus preventing early irritation of the parts, which leads to handling, self orgasms, nervous derangements, and especially early prostatic hyperæmia.

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* Read before the Homœopathic Medical Society, County of Kings, New York, June 19, 1896.

These conditions are the essential factors in the causation of masturbation ; and if they were not present with their constant irritation, I do not believe that the influence of the elder over the younger child would be what we must now accept from the history of these cases, as the cause of this vice; and if physicians can remove this factor, much will be gained for the future generation, and the principal cause of enlarged prostate, masturbation, will have been removed. But in a given case, when this habit has been practiced and, owing to proper advice or from fear of its results, it has been discontinued, unless at the same time the irritating cause has been removed, the mind will continue to dwell upon lascivious fancies, keeping up the same chronic congestion or over distension of the prostatic vessels. When boys of this class are obliged to work hard, physically or mentally, with athletic training, leaving little time for solitude, some benefit will result; but a perfect normal, healthy condition cannot possibly result unless the original exciting cause has been eradicated.

Next in importance is the improper association of the sexes. The intense strain, prostatic and general, of the unsatisfied desire, etc., which results from the close association frequently allowed among the young and unmarried is often the cause of future ill-health and unhappiness, the misery of a hypertrophied prostate. This occurs while the person in his ignorance believes that no harm has been done, and that no commandments have been broken. Nature, however, has been outraged, and in time the penalty will have to be paid. I am therefore greatly impressed with the fact that medical men, as a rule, have been negligent in their duties to the unmarried men in their care in not giving them the proper admonition on this subject and advising the cultivation of the intellectual faculties, and not to indulge in carnal desires and diversions, and the reasons for such advice. This is especially true when we consider the tendency of the times, and the frequency with which our attention is called by the daily print to the actions of sexual perverts, etc.

We wish also to condemn the too frequent advice given by many to the young or older unmarried men that for their health they should practice male prostitution. They might as well advise self-pollution or constant indulgence in sensual thoughts.

The effect on the prostate is the same, and we may add that the perverted sexual habits of married men, who for some reason do not desire the greatest of God's gifts—the family—has practically the same effect. A chaste mind and body are perfectly consistent with health. If abnormal irritations cause lust, remove the condition, but do not pamper to it, and allow your charge to ultimately suffer ill-health and life-long unhappiness. If he has urethritis, do not discharge him until the urine is free from epithelial and other shreds. When stricture, congenital or acquired, is present, give it the proper treatment, and if there is a stone in the bladder remove it. Should the saddle on the wheel they ride be improperly constructed, and it cannot be changed, have them discontinue the wheel, etc., etc.

Treatment.—When enlargement of the prostate has assumed some magnitude and causes distressing symptoms, we have many roads to follow. We should first use the milder means at our disposal before resorting to the more radical methods, and if fairly well directed and observed by the patient most cases may and do go along to the close of life with very little inconvenience. A warm, equable climate will be of great advantage. The body should be clothed summer and winter with flannel; when arising at night woolen slippers should be worn. Moderation in all things must be the constant guide. Over-excitement and drinking must be avoided; plenty of milk, however, should be advised; the bladder should never be allowed to become over-distended; horseback riding and wheeling should be interdicted, and mental and physical labor never carried to the point of fatigue. Counsel the patient to avoid straining when urinating, even when the desire is urgent. Doctor Hale has suggested in such cases that if the penis is grasped by the patient at the time of urination, obstructing the flow in the pendulous urethra and thus overdistending the membranous and prostatic urethra and then suddenly let go, the dam which is caused by the enlarged prostate will remain open and allow a good stream to flow, provided straining is avoided; and they may for years avoid the necessity of the catheter or operation. If, from chilling of the surface, over-eating, or neglect of the calls of Nature, retention occurs, warmth, and the indicated remedies, aconite, gels, should first be used. If these fail, try Dr. Bang's suggestion of placing the patient in bed with the pelvis elevated, giving a high rectal enema, and irrigate the urethra with a hot boric acid solution, to be repeated in an hour or two. This is sometimes followed by a spurt of urine, with evidence of relief on the part of the patient. Should these means fail, the catheter or aspirator are our only resort.

In the use of the catheter a large size is frequently successful, while the smaller one fails to pass. We may select or use, as indicated, the soft rubber velvet eye, the silver catheter with a long curve, the English catheter properly bent, or the Mercier. In this operation observe strict antisepsis and asepsis ; always be surgically clean, and teach those who are about to take on a catheter life the necessity of absolute cleanliness. In the first catheterization it is best not to remove all of the urine, leaving some residual urine, as indicated in individual cases, always bearing in mind that the first catheterization is very frequently followed by urinary fever, etc.

The remedies most useful are pareira brava, sabal ser., caladium, sulph. cimicifuga, staphisagria., nux. vom., aloes, pulsatilla and antipyrine, which are, together with general hygiene, frequently all-sufficient. As an illustration, the following case is cited: Seen in consultation with Dr. Malcolm Leal, Mr. P., aged sixty-five; retired merchant; family history good; had been losing flesh and strength for some months; tongue red at the tip, food did not digest well, and many articles of food caused much distress and vomiting; the pulse was weak and feeble; the patient was occasionally annoyed with a dry cough; the lungs, larynx and pharynx on physical examination gave no evidence of disease.

For some years he had been troubled with frequent and painful urination; incontinence to such an extent that it necessitated the constant use of a urinal. At the time of consultation the desire to urinate occurred every five to twenty minutes, was very painful and unsatisfactory; there were twinging pains referred to the neck of the bladder, causing him to cry out, and preventing sleep; the patient said that he had not had fifteen minutes' sleep in four days. When he assumed a sitting posture he did so very carefully on account of the pain in the perineum produced by pressure. The amount of urine for the previous twenty-four hours was 2,160 c. c. Specific gravity 1,007; urea, 0.8 per cent.; albumen, $\frac{8}{10}$ of 1 per cent.; reaction, alkaline; a large sediment of thick, viscid, ropy mucus composed apparently about one-third of the quantity passed. The microscope revealed a large number of pus corpuscles, ammonio-magnesium phosphates, etc.

Physical Examination. — Bladder contained about three ounces of residual urine; there was tenderness over the supra-pubic region, and the perineum was sore and sensitive to the touch. The prostate was about three inches in its lateral diameter, sensitive and hard to the touch, and the bladder walls were somewhat thickened. Constipation was complained of, the stool being accompanied with great pain. The muscular cramp or pain and irritability of the prostate were relieved, and a fair night's rest secured from the first day, by a three-grain dose of antipyrine at bedtime. This remedy was given nightly for two weeks, when it was discontinued on account of the improved condition of the patient. The specific remedies from May 3d, the time of the first consultation, to June 20th, were chimaphilla umbelatta and sabal. ser. Improvement was rapid, and on the last date urination was free from pain, occurring about every three hours; the urine was approximately normal in quantity and quality; the patient slept as well as could be expected at his time of life; had gained rapidly in strength; there was no pain on sitting, the prostate was reduced to two inches in lateral diameter, and was free from pain on manipulation. The only symptom left was an occasional pain referred to the end of the penis. Examination gave no evidence of stone in the bladder, and the symptom was probably reflex from the prostatic urethra, and was relieved by clematis. No local treatment was used in this case.

In the treatment of prostatic disease judgment and experience is required. There are cases that will not respond to remedial and hygienic treatment alone, but require local application, such as hot saline douches per rectum thrown against the prostate; heat or cold by the rectal psychophore; others do well on the introduction of a full sized conical steel sound every five to eight days. Postural treatment by elevation of the hips and rest in bed is frequently of great benefit.

When the hypertrophy has an accompanying posterior urethritis and some shreds of epithelium are found in the urine, whether from a simple inflammation or are the remains of an imperfectly cured gonorrhœa of long standing, the deep urethral injections of nitrate of silver, 1 to 8,000 to 1 to 500; thallium sulphate, 3 to 6 grains to the ounce; Ultzman's solution of 1 grain each of alum, zinc sulph. and carbolic acid to the ounce of water, or a 5 per cent. solution of iodoform with sterilized sweet oil, every four to eight days, as indicated, may be of great benefit; as in case N. B., age fifty-five, married, occupation tinsmith, presented himself for treatment at my genito-urinary clinic at the Metropolitan Post-Graduate School of Medicine, September 21, 1895; had always enjoyed good health, except that for some years he had been annoyed with painful urination, the act being painful at times and the stream small and hesitating, with all the other symptoms of prostatic hypertrophy. The diagnosis had been confirmed at the New York and Presbyterian Hospitals, where he had been advised that emasculation was his only hope. He had the desire to urinate every few minutes, but it was so painful that he was obliged to close the doors and windows to prevent the neighbors hearing his screams; during the act was obliged to press his head against the wall—frequently getting on his hands and knees—pain extended down the thighs and into the penis.

The prostate was about 2½ inches in lateral diameter; the bladder walls were a little thickened; it contained no residual urine; pareira brava 2d was prescribed, with deep urethral injections of nitrate of silver, 1 to 2,000, administered every fourth day, gradually increasing to 1 to 500. One month's treatment relieved the pain and frequency of urination. The prostate was reduced to about two-thirds of its original size.

In the past, when mild methods failed, our only hope of making life endurable was median or lateral prostotomy or supra-pubic cystotomy and drainage, which, while relieving the pain and retention, caused inconvenience, annoyance and offensiveness to mind and body, with possible urinary abscess and sinuses; yet in selected cases there is no doubt that these operations are to be preferred to all other means. Electricity is sometimes, in special cases, of great benefit.

In 1893, Dr. White, of Philadelphia, stated to the medical world that in his experience and from his studies the removal of the testicles would be followed by atrophy of the prostate, and relief of the distressing symptoms caused by its overgrowth, and that the death rate was smaller than that from prostotomy. The relief was as great or greater, and not followed by the constant reminder that an operation had been made and that the results were ever with them. His statistics of 111 cases to date are: sixty-four greatly reduced in size, and in twenty-four more the relief of the general symptoms were such as to justify the belief that the prostate had grown smaller.

The cystitis was cured in fifty-two cases; there was 10 per cent. of apparent failures and a mortality of 7 1-10 per cent.

Unilateral orchotomy sometimes acts very satisfactorily. A case now under my care, where the left testicle was removed five years ago, resulted in almost complete atrophy of the prostate of the corresponding side, the right being somewhat overgrown; no urinary symptoms are now present.

But even in the very old there is a great antipathy to the thought of the removal of the testicles. All men feel the humiliation of being unsexed, and would prefer a considerable amount of pain and discomfort rather than relief with such loss. We all know that the nerve and blood supply of the prostate and testicle are of different origin; that the relation of the testicle to the prostate is one of function only. Emasculation discontinues the functional life, but it also eliminates from the system that power that the testes have of giving to man his masculinity, just as the ovaries give the feminine characteristics to the female; and we know that if they are removed early in life there ensues a complete change of character and development. This being the case, the resection of the vas deferens should give all the relief, and possess none of the disadvantages.

Parone, from a series of experiments regarding the difference in effect upon the prostate, of castration and excision of the vas deferens, found that both caused atrophy of the prostate, and that the anatomical changes as revealed by the microscope, differed in no appreciable manner.

The following case of resection of the vas deferens, from the genito-urinary ward in the Metropolitan Hospital, may be possibly instructive and give weight to the theories presented:

J. A., aged sixty-nine, married, born in Algeria, occupation, merchant; hereditary history, negative; has been a moderate drinker of whiskey and beer and used tobacco to a moderate extent; before present illness had always been comparitively healthy. Forty years ago had a slight eruption over the body; epitrochlear and cervical glands slightly enlarged, otherwise no history of syphilis. Present history: Two years ago suffered much gastric irritability and about this time noticed much difficulty in passing his urine, there being abnormal frequency of desire, with the passage of only a very fine stream; this condition increased in severity, urination became painful and a catheter life was a necessity, which has been continued uninterruptedly for eighteen months. He experienced slight pain on defecation. Has hydrocele on the right side, which has existed for about two years; previous to its appearance there had been marked œdema of the feet and ankles, but this condition was present only to a slight degree; complains of a considerable pain in the lumbar region; general condition feeble; temperature normal; pulse full and strong; moderate hypertrophy of the heart. Arteries atheromatous. Urinalysis: The amount of urine varied from forty-five to seventy ounces in twenty-four hours; specific gravity 1012; albumen, $\frac{1}{16}$ by contact test. Sediment: Few hyaline and granular casts, moderate amount of pus cells; few round and flattened epithelium.

Rectal examination: Painful; prostate about the size of a large orange. In order to give relief from the painful catheterization and to make his last days comfortable, an operation, at his urgent request, was performed February 27, 1896. I was ably assisted by Doctors Curry and Newman, of the House Staff. Local anæsthesia was made with a 4 per cent. cocaine solution by the infiltration method, as his kidney condition contra-indicated the use of ether. About one-half inch of each vas deferens was resected and tied with a silk ligature, and the ends knotted together. The operation was made about three-quarters of an inch below the external abdominal ring; the wound was closed without drainage and dressed antiseptically; little pain was experienced during the operation, nor was it followed by shock or reaction. The Case Book gives the following history:

First day: Very comfortable; slight rise of temperature; considerable pain during the night.

Second day: Wound dressed, union by first intention.

Third and fourth days: Has been catheterized every six hours up to this time; pain slight, temperature normal.

Fifth day: Patient able to pass his urine naturally.

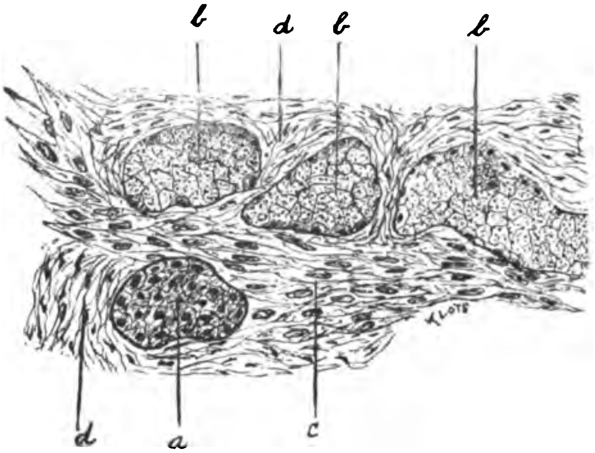
Sixth day: Same conditions.

Seventh day: Again necessary to use the catheter.

Eighth day: Stitches removed; wound healed. From this time on was able to pass the urine naturally, but his kidney condition grew worse, and being unable further to perform their functions, he died of chronic interstitial and cystic nephritis on the sixteenth day after the operation.

Autopsy: Body emaciated; costal cartilages ossified; right lung weighed 22½ ounces, adherent at apex; interlobular adhesions between upper and middle lobes; pleura normal except at apex, where it was slightly thickened; crepitation present throughout; air vesicles greatly distended with air; anterior portions of lower and middle lobes congested; on expression a sero-sanguineous fluid exuded from the congested portions; left lung weighed 13½ ounces, firmly adherent at apex; pleura normal except at apex, where it was greatly thickened; anterior portion of the lower lobe congested; numerous miliary nodules of a cheesy character existed at the apex. Heart weighed twenty-one ounces; muscles quite soft; the whole of the aorta from the valves to the diaphragm was inelastic and greatly thickened by calcareous plates; aortic valves thickened, especially about their base; mitral valves thickened to about ⅛ of an inch by calcareous plates, especially about their free border; tricuspid valves thickened; chordæ tendinæ shortened; pulmonary valves normal; liver weighed fifty-five ounces; capsule smooth and glistening; substance tough, cut with extreme resistance, presented a nutmeg appearance; gall bladder, five inches in length and greatly dilated, containing twelve calculi, which were pyramidal in shape and about the size of chestnuts, one being the size of a walnut. These calculi were dark in color, except the largest, which was yellowish. The gall bladder contained but little bile; spleen weighed 7½ ounces; surface rough and dark green; on section gave a gritty sensation and evidence of slight congestion. The right kidney with perinephritic fat weighed 13½ ounces. On the upper and outer surface a cyst the size of a lemon, with thin walls and filled with a serous fluid; there is an excessive amount of perinephritic fat, which was closely adherent to the capsule; capsule about 1-16 of an inch in thickness and closely adherent; kidney surface pale, the superficial vessels injected; on section the above mentioned cyst protruded through the kidney substance into the pelvis; on the upper and outer portion another cyst about the size of a chestnut was found, and throughout the substance numerous cavities of various sizes were found. The cortical substance was pale and from 1-16 to ⅛ of an inch in thickness; pyramids were obliterated by cavities and interstitial growth of fibrous tissue; pelvis contained no fat; it was greatly dilated and vessels were greatly congested; the walls tough and pale. The left kidney with perinephritic fat weighed 14 ounces; the great increase of perinephritic fat was here noticed, and closely adhered to the capsule, which did not differ from the capsule of the right side; surface of the kidney roughened, dumb-bell in shape, containing numerous small cysts, which are also scattered throughout the substance of the kidneys. Cortex from $\frac{1}{16}$ to ⅛ of an inch in thickness; pyramids obliterated by these cavities of interstitial fibrous tissue; pelvis dilated, presenting the same appearance as the right; ureters greatly dilated, and walls thickened; bladder walls thickened to about ½ inch in diameter; mucous membrane lies in great folds of a deep red color; vessels congested and turgid; moderately distended with muco-purulent fluid. Prostate greatly enlarged, especially left lateral and middle lobe; the middle lobe projecting forward, distorting the prostatic portion of the urethra, and about the size of a large crab apple, 2¼ inches in lateral diameter.

The microscopical examination, made by Dr. E. D. Klots, curator of the Metropolitan Hospital, discloses proliferation of cells lining the tubules, and in many fatty degeneration or partial or complete disappearance. The muscular, and even the connective tissue, give evidence of great cell proliferation, that, probably in time, would result in degeneration and disappearance. We believe, therefore, that separation of function of the prostate and testicle, by resection of the vas deferens or emasculation, causes proliferation, fatty degeneration, destruction and then disappearance of the cell elements, first in the tubular tissue, then in the muscular, and finally, but very slowly, in the connective tissue composing the prostate.



a. Proliferation of the lining cells of the tubule.
b. Fatty degeneration of the proliferated lining cells of the tubule.
c. Muscular tissue.
d. Connective tissue stroma showing proliferating cells.

In conclusion, all cases of prostatic hypertrophy must be individualized, and no operation should be undertaken without proper consideration of the present and probable future conditions of the patient.

In the well-to-do and those who will follow proper advice there is no doubt that many can be cured, and a large number relieved and life made comfortable with remedies, hygiene and local treatment. But there are cases where relief can only be procured by surgical methods, and then special care must be taken to properly choose the best operation for each individual case. If resection of the vas deferens or emasculation is decided upon, immediate results may be expected; that is, atrophy of the prostate, relief of pain on micturition, return of the expulsive power of the bladder and a clearing of the urine, in moderately recent cases, when the enlargement is due to an overgrowth of the glandular and muscular elements, closely resembling the normal; but if fibrous changes have taken place and the prostate is composed of dense, fibrous connective tissue elements and only a few remnants of the muscular and glandular tissue, the results will be correspondingly slow.

Pain, muscular cramps or spasms, due to straining and the symptoms of chronic cystitis are usually ameliorated at once; all things being equal, the less the patients are dependent upon their catheter the quicker and more satisfactory will be the relief. If a catheter life of two or more years has existed and the walls of the bladder are sacculated, the advisability of drainage rather than the separation of the function of the testicle and prostate will require careful consideration. Lastly, in favorable cases, we are of the opinion that resection of the vas deferens will give all the relief that emasculation can possibly give, and without depriving the patient of his masculinity.

TALKS WITH YOUNG MEN UPON THE SEXUAL FUNCTION.

By WALTER F. MORGAN, M.D., LEAVENWORTH, KAN.

PART I.

"He is a free man whom the truth makes free, and all are slaves beside."

I AGREE with honest old Ben Franklin that "the sexual passion is difficult to control," and yet experience has taught me that it is not uncontrollable. Should the discussion upon which I now propose to enter seem at times to trench upon subjects of a foreign nature, I bespeak your patient forbearance. The great danger in such an investigation is that the horizon will be too narrow, the field of vision too limited. There is nothing on the earth beneath nor in the heavens above that is not related to man, or which may not be compelled to minister to his use and enlightenment. Do not be alarmed at this statement! We will try to be simple and honest towards each other, and as "life is short and art is long," we are obliged to be brief. At the close of my remarks, each one who honors me with his attention is expected to freely question and criticise, as our only object is to come as near to the Fountain of Truth as our limited faculties will permit.

The time of greatest danger to the young man is the age of puberty, when he suddenly discovers himself to be in possession of the sexual passions and power of a man without a man's judgment and experience to guide or restrain him. It is probable that the majority of young men, and, possibly also of those who have reached years of discretion without being discreet, yield to convenient temptation; but there are, fortunately, many exceptions to this rule—if indeed it be a rule—as shown by the following instances:

Two robust farmers' sons, æt. sixteen and eighteen respectively, being intimate, as their father's farms joined, once held this conversation:

A. said to B., "B., the old folks will not be at home to-night, and if you come to our house you can have some fun with the girls" (meaning his sisters). At the appointed hour B. went and found the girls not in the least backward in responding to his advances. However, it suddenly occurred to B. that he was about to do a contemptible thing, and under this revulsion of feeling he rushed from the house, never again to enter it.

Years afterward, during which time A. and B. had not seen each other, they again met, and, after the usual salutations, A. said: "Well, B., I married a delicate girl, too unselfish to complain as she ought, and who, I regret to say, was seriously injured in health by my too frequent sexual demands. I at last learned, when too late, the true state of affairs. My wife died at forty-five, and her doctor said that with proper care she probably might have lived to be three-score-and-ten. I hope, B., that you have no regrets on this score." "No," said B., "while I also married a delicate woman, and sometimes, especially when younger, I have wished her of a more amorous disposition, still her wishes have always controlled in this matter, and she is now near seventy years old, and the mother of a large family, and I doubt if I could have been so happy or contented with any other woman." Regarding A.'s amorous sisters it was learned that one had been in a house of prostitution, and the other in an asylum for the insane. While considering Nature's checks to the sexual appetite, one or two more examples will be offered. An over-ardent youth had been advised by his physician to marry—rather hazardous advice, by the way. Some ten years subsequently he became engaged to a farmer's daughter, and, conforming to a custom of rustic life, he visited his intended quite regularly on Sundays, and was frequently invited, during inclement weather, to remain until Monday morning. The wedding day was near at hand, and the ardent youth concluded, as a very convenient opportunity offered, that the pleasures of the nuptial bed might be anticipated.

The girl at first objected, but soon consented. Here conscience suddenly and unexpectedly intervened, accusing the youth of lack of self-control, and effectually putting to rout his desire. Explanations, however, did not satisfy his partner, who then pleaded for his embraces for her own sake. But conscience was firm, and desire did not return to the man until after the marriage was duly solemnized. A young physician of intellectual tastes was intimate with another young physician much devoted to Bacchus and Venus, who succeeded in inveigling the former into a house of ill-fame, but instead of arousing desire in him, as intended, an attack of nausea was the only result.

The first named gentleman is now the respected father of a large family; the second died of his excesses at the age of twenty-seven. A physician, now eminent, had frequently been importuned by his friend to accompany him to a *maison-de-joie*. He said: "I finally went with my friend, but after having connection with a courtesan, I left the house feeling that the burdens of the whole city rested upon my individual shoulders. This was my first and last experience of this kind." In my medical practice I have occasionally met husbands who, as soon as their wives began to suffer from the nausea of pregnancy, were invariably affected themselves in a similar manner, through sympathy. Were this more generally the case in this world, there would be more happy wives and healthy children!

Accepting the dictum that the chief duty of the physician is to teach people how to keep well, I do not intend to limit our discussion to the narrow field of drug prophylaxis. On the other hand, I consider that much more can be accomplished by carefully studying those beautiful and beneficent laws, the strict observance of which invariably tends to greatly increase our happiness and longevity. In considering the prevention of sexual disease, I wish to speak further of the marital relations. And I do this under the impression that what our fellow men need is education regarding the laws of life. "Experience is a dear teacher, but fools will have no other." To some extent all must plead guilty in this regard. A man's wisdom may be measured by the extent to which he profits by the experience of others. A great many married youths know so little of the laws of their being that they would interfere with or destroy the germ of human life with as little compunction as if it were the germ of a vegetable. Conservative Nature, it is true, so hedges about the divinity of the new being that it cannot often be destroyed without compromising either the physical or moral health, and frequently the life of the mother. Still, there are those who, possessing that little knowledge which is a dangerous thing, have the temerity to rush in where wise men fearful stand, and do such deeds as well might make devils laugh and angels weep. An innumerable host of women are rendered invalid through a mistaken belief that the abortionist can safely interfere with the fruits of the womb. Perhaps an equally large number suffer from attempts to prevent conception. I recall, for example, the memory of a pretty, fragile little woman, the mother of three fine boys, the youngest æt. three years. Owing to the husband's financial embarassments, she decided, with his consent, to avoid another conception, and adopted for the purpose the plan of incomplete sexual intercourse. Her nervous system soon became deranged, of which any experienced practitioner, if consulted, could have forewarned her. She finally became mentally unbalanced, and declaring herself pregnant, appealed earnestly to me for relief, threatening suicide unless I acceded to her demand for abortive treatment. I asked for a consultation, to which she would not consent. Finally, my patient applied to a lady friend, who gave a cotton seed preparation, resulting in great prostration of the patient and the final expulsion of a uterine mole. Fortunately, the lady ultimately recovered her mental, moral and physical health, and vowed future obedience to Hygeia.

The time proposed for this conversation having now expired, I will defer until our next meeting a further consideration of the subject. Questions and criticisms are now in order.

First Hearer: Doctor, in the case of B., whose wife was the mother of a large family, was the husband's complaint regarding her lack of amativeness probably just?

Doctor: Women sometimes—though very rarely—conceive from a single coitus, and then feel repugnant to a repetition of the act. The rule seems to be that during that particular period when conception is most liable to result from copulation, the woman's desire equals that of the man. At other times she has little desire, and frequently a positive aversion, to the sexual act. This rule often holds good even in prostitutes.

Second Hearer: Then, Doctor, is it your opinion that the number of children in a family is no criterion of the extent to which the parents indulge in sexual intercourse? or, to quote a vulgar axiom: "Grass does not grow upon a hardly beaten road?"

Doctor: I think this frequently is the case.

Third Hearer: Doctor, perhaps it was because of the brevity of your lecture that you said nothing about preventing disease in those who think they cannot, or, at least, will not, control their passions.

Doctor: Medical books are filled with directions for this purpose, and the efforts of experimenters have always been largely turned in this direction; but experience has taught me that the man who suffers least physically from illicit intercourse, usually suffers most mentally and morally, and hence, as I before said, the chief work for physicians is to teach men the laws that govern their being.

Fourth Hearer: Doctor, what are women for?

Doctor: Well, that's a pretty broad question! What are *men* for? Now, your business is to handle horses. What are mares for? Do you not generally keep them in your livery service, and rarely for raising colts?

Fourth Hearer: Yes.

Doctor: And do you not find that your stallions also are healthier for steady exercise, and are you not careful to give them plenty of it, except during the breeding season? And is it not according to the general experience of horsemen that it not only does no injury to the horse or mare to be denied the gratification of the sexual instinct, but, on the contrary, that it increases their speed and endurance?

Fourth Hearer: I admit the correctness of your statements regarding horses, but are not men who have no connection with women generally addicted to worse habits, for example, masturbation?

Doctor: When a human law is violated, scrupulous care is used to adjust the degree of punishment to the supposed *intent* of the criminal, and in this our human laws seem founded upon the Divine.

Now, the *intent* of all who seek sensual gratification as an *end* and not as a *means* is the same, and hence the penalties, all things considered, seem to be substantially and in final effect the same, although the methods by which physiological laws are violated may seem to be widely different. Let us again resort to comparative physiology, which has aided us so materially in our efforts to solve these problems pertaining to human health and happiness. Do not the males of our domestic animals often suffer like the human male, and from the same causes, over-feeding and a lack of exercise, resulting, for example, in the habit of masturbation?

Fourth Hearer: I have been so informed by the veterinarians, and also that they are cured by the same means as are useful in man.

Fifth Hearer: Doctor, do not some of the medical authorities claim that a moderate use of the sexual organs is generally necessary to perfect health?

Doctor: Yes, but like every other question which deeply affects our race, opinions differ, and in order that we may reach the nearest to absolute truth, each one must stand firmly by the lessons of his own experience. In the struggle to control our passions instead of being their slaves, we see around us too many successful examples to allow us to doubt our ability to succeed. On a large scale, we may cite the example of the priests and nuns, whose health and longivity seem to compare favorably with that of mankind in general.

Fifth Hearer: Doctor, I don't believe they are true to their vows of chastity—as a rule.

Doctor: Indeed! I have myself been intimately acquainted with several bachelors and men with invalid wives, who lived lives of the strictest chastity.

Fifth Hearer: Regarding sexual matters is it not well-known that a great many resort to falsehood?

Doctor: That is no less true, I think, of financial and other matters among those who are not honest. And herein we may learn the influence of personal equation, and the importance of developing our own latent virtues, and then we shall be able to appreciate and fully understand those whose lives are above mediocrity. Let me ask you, what is it in us that demands the gratification of sexual appetite—the physical or the spiritual?

Fifth Hearer: The physical, of course.

Doctor: Why is it that the rules of the turf forbid, while training for a race, the use of the stallion for mares, unless experience has shown this to be the better way?

Fifth Hearer: I admit that horses of either sex about to run for a purse are not allowed to gratify their sexual desires, and that this is also true of the athlete while in care of his trainer.

Doctor: You are satisfactorily answering your own objections, and I assume that, so far as the animal part of us is concerned, if it does not harm a good athlete nor a good horse to be thus treated, but on the contrary, increases his physical stamina, it seems fair to infer that when this rule is properly applied its beneficial effects will be still more marked in those who lack vitality.

Fifth Hearer: It seems necessary to make the admission.

Sixth Hearer: Is there any reason, Doctor, why continence should be more natural and beneficial in one sex than in another?

Doctor: Judging from comparative physiology and experience, I know of none.

Seventh Hearer: Doctor, it seems to me if we look at this question from a scriptural standpoint, the part assigned to the woman in the generation of the race is so widely different from that of the man, especially as she has to bear the retributive pains of parturition, it is difficult to place the two sexes on the same basis in a consideration of sexual matters.

Doctor: It may, perhaps, seem so, and yet the progressive theologians and the scientists are steadily removing from our pathway the scriptural as well as other stumbling-blocks. A careful study of parturition in the lower animals and of the female savage seems to show very little, if any, difference in the relative degree of pain. And regarding the civilized woman, whatever difference really exists may, I think, be reasonably explained on the ground that her greater susceptibility to pleasure necessarily involves a greater susceptibility to pain.

Seventh Hearer: Do you then attribute the greater amount of pain attending the parturient act in the human female chiefly to causes belonging especially to civilization?

Doctor: Yes; our custom of tenderly guarding and preserving the lives of our feeble, defective and deformed children, who, when reared, are allowed to beget their kind, instead of permitting them either to die of neglect and exposure, or of destroying them, as is now done by some of the savage races, and the lower animals, and as was formerly the custom among the Greeks and other nations, and our foolish conformity to the more or less unhygienic caprices of fashion—all these causes combine to lower the average vitality of civilized races.

First Hearer: Notwithstanding these great disadvantages of civilized life, do you consider them more than compensated for by its benefits?

Doctor: I do.

Second Hearer: Doctor, regarding A's wife, mentioned in your lecture, did not the physician "bank" too much on his probable powers of prognosis, when he said that with proper care she *might* have lived to be three-score-and-ten?

Doctor: Possibly not. An eminent English authority* has recently been quoted as having said: "In my opinion, if men and women would all through their lives persistently and intelligently obey the physical, mental and moral laws of health, 70 per cent. of the human race would live to be 110 years of age.

First Hearer: Doctor, you stated that even prostitutes usually have most sexual desire at the proper time for conception. Wiil you explain to us how this can be reconciled with the fact that such women rarely conceive?

Doctor: The question is pertinent. Although these poor women lead such an unnatural life, still they have the menstrual flow, and it is long before the voice of Mother Nature is silent to their ears. They usually cling, more or less firmly, to one particular man, of whom they speak as "my friend," and frankly confess that sexual commerce with other men—especially with strangers—is loathsome to them, although it is a part of their wretched trade to pretend to have pleasure in the act. But when frankly questioned by their doctor they tell a very different story. A very small percentage of these women are first led astray by their desires; a still larger number by a love for finery and a life of ease; but the great majority are first seduced by the men they love.

Second Hearer: Why is it that prostitutes are so seldom impregnated?

Doctor: Aside from causes already mentioned as sometimes obtaining in wedlock (sexual excess) repeated gonorrhœal attacks soon seal up the fountain of embryonic life (the ovaries), and thus Nature protects herself against a too flagrant violation of her laws, and prevents to some extent the propagation of diseased children. Conception in women of this class is usually followed by miscarriage or abortion, and when a living child is born its term of life is apt to be very brief. The same causes which render the woman barren also produce impotency in the man.

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* Dr. B. W. Richardson.

Eighth Hearer: Doctor, will you quote for us some of the eminent authorities who hold that sexual continence is not injurious and is generally beneficial to health? As I understand the matter, you hold that the great preventive of sexual disease (and the only one not liable to act like the boomerang) is to reserve the sexual function for the procreation of our kind, and never to use it unless we are willing or desirous that the act may have its natural result; and that as we ought to take food chiefly to preserve health and life, and not for the mere pleasure of eating; that as gluttony and lust invariably lead to disease, so does the operation of every other organ of our bodies when diverted from its highest function?

Doctor: You have rightly construed my meaning. I will now quote from some of the great authorities.

Ninth Hearer: Doctor, before giving us the quotations, will you allow me to say I think most men prefer to have a good time while they live, even if they should, as a consequence, die a few years sooner. Have not people always gratified their senses, so far as able, and is it not reasonable to suppose that they always will?

Doctor: Perhaps, at the present time, so far as the majority is concerned, this may be true. But it is not as true of the present as of the past, and if we may judge the future by the past, it will gradually become less and less true. There is no way to have a really "good time" while we do live, except by learning and obeying those laws expressly designed, as seems transparently evident, to promote our health and happiness.

Ninth Hearer: Then why do so many violate the laws of their being when they know what the consequences will be?

Doctor: A great many do not know the consequences. Nature treats us as we do our domestic animals. We generally make them useful servants by kind and gentle means, but if they are incorrigible we punish them until they are sometimes useless, valueless and lifeless. It seems to me that no sane person, after having once experienced the joy of existence felt by those who have learned to obey Nature's laws, would ever be seriously tempted to return to a mode of life which involves the penalties for a violation of them.

Ninth Hearer: Then, Doctor, are we to understand that in your opinion the most potent way of improving the race is through the sexual function?

Doctor: Yes.

Ninth Hearer: And in order that parents may beget children superior to themselves they should not copulate except when they believe that they are in their highest physical, mental and moral condition, and that they should endeavor to make this high condition as habitual as possible?

Doctor: Certainly.

Ninth Hearer: And in regard to comparative physiology, is it not likely—in the light which we seem to have obtained during this discussion—that we can now understand certain well-known facts in the breeding of the lower animals; *e. g.*, why we sometimes get a "weed" in the thoroughbred horse?

Doctor: Yes, and my own experiments, I believe, confirm this view, and also explain why an animal of great speed, endurance, beauty and intelligence is sometimes produced by parents of a mongrel breed, who happened to be at the time of copulation in the highest condition of which they were capable.

Ninth Hearer: And does this not also explain, with a reasonable degree of probability, why it sometimes happens that the same parents at one time beget superior and at another time inferior offspring?

Doctor: Making due allowance for all those influences brought to bear upon the mother during the gestative period, I have no doubt that this is the correct explanation. And I think a conception of this great physiological truth must have been in Shakespeare's mind when he referred disparagingly to the child "got 'twixt sleep and waking."

Sixth Hearer: Doctor, regarding the involuntary discharges from the male sexual organs, when they occur only at intervals of one to two weeks—are these injurious to health?

Doctor: No, they are analogous to the female monthly discharge, and are no less physiological. Of course, these emissions fluctuate considerably within physiological limits, and rarely become pathological unless means are used to excite them and to increase their frequency.

Sixth Hearer: Then are we to understand that a man who has no sexual connection can implicitly trust Nature in this matter, and pay no attention to these emissions so long as they are not too frequent and have no injurious effect upon his health?

Doctor: Certainly. This flow from the sexual organs of the male differs from that occurring in the female in some important respects. When normal the fluid is free from blood, often contains spermatozoa, is more irregular in its time of appearance, is more under the control of the will, and usually occurs during sleep, accompanied by pleasurable sensations of which the person is more or less conscious.

During our late war of the rebellion, thousands of young men could have testified that the severe exercise and limited diet of the "tented field," wrought a wonderful change in this respect. The demand upon mind and body being so great, a large part of that nervous force which had previously gone to the sexual organs being now diverted to other and—for the time being—more important uses, the result was a lengthening, of the interval between these emissions, from a few days, to weeks and often to months. And this conservative plan of Nature, favored by the regular habits and pure air usually found in such a life, serves to explain to a great extent the well-known fact that many young men who seemed frail when they enlisted, proved to be very enduring soldiers.

Eighth Hearer: Doctor, from the fact that you explain the physiology of man by that of the lower animals, are we to infer that you have fully accepted the dictum that man's intelligence differs from that of animals only in degree but not in kind?

Doctor: I have accepted that view.

Our time for adjournment having now arrived, we will postpone further discussion of the subject until our next meeting.

IN DEFENCE OF THE LAW OF SIMILARS AND THE LAW OF CONTRARIES.*

By PERCY WILDE, M. D.

IN the first of a course of post-graduate lectures, delivered at the London Homœopathic Hospital, Dr. Richard Hughes gave what must be considered an official account of the doctrines of the Homœopathic school.

The address raised many difficulties in my mind, and conveyed the impression that it was hardly calculated to stimulate the enthusiasm of a scientific inquirer, even if previously inclined to accept the truth of the law of similars.

Dr. Hughes states: "1st. You will observe that Hahnemann's formula is not, as commonly given, *similia similibus curantur*—likes are cured by likes—but *similia similibus curentur*—let likes be treated by likes. It does not state a law of Nature, it gives a rule of art—'to cure—choose.'"

This statement invites the questions:

Does the Homœopathic school regard the law of similars as a "formula" invented by Hahnemann, or as the expression of a great natural law, recognized by the ancients, and which belongs to the earlier foundations of therapeutics?

Does the Homœopathic school claim to base its practice upon a "rule of art" which does not represent a law of Nature?

If we accept the position as Dr. Hughes appears to present it, we voluntarily give away the substance of our belief, and expose ourselves as the worshippers of a "formula." Hahnemann said: "Let likes be treated by likes," therefore we treat people in this manner. We ignore the fact that the law of similars and the law of contraries were laid down as the basis of medical practice by the ancients, and constitute the guiding rules of therapeutics as taught by Hippocrates. They have both suffered very much at the hands of commentators, but the fact remains that the physician who is called the "Father of Medicine" taught that both were true. This is important, because in explaining the meaning or application of the one or the other we are bound to take into account that the greatest exponent of the law of contraries found no difficulty in accepting the law of similars.

It was open to Hahnemann to give any reason or explanation of the law of similiars which appeared just to him, but in reference to the words in which either law is stated, he had no more right than any other commentator to alter the text. The disadvantage of doing so is made manifest by the numerous errors into which both Hahnemann and his disciples have been led in consequence. "Like things are cured by like things" is a statement of fact, a generalization respecting natural phenomena; it does not assert that like things are only cured by like things.

Hahnemann alters it to "Let likes be treated by likes," and then defines it, "Choose in *every* case of disease a medicine which can of itself produce an affection similar to that it is wished to cure."

Historically, this is a false interpretation of the law of similars. It implies that in *every* case of disease the physician must employ a *medicine*. This is neither in accordance with the teaching and practice of Hippocrates, nor is it a scientific or rational mode of treatment.

But Hahnemann having adopted this false interpretation of the law of similars, it is easy to understand Dr. Hughes' definition of Homœopathy: "Homœopathy is thus a therapeutic method. It belongs, moreover, exclusively to that part of the therapeutic sphere in which drugs are our instruments."

If this is accepted as the position of the Homœopathic school, it is one which has no basis in science, and the falsity of which can be scientifically demonstrated. It involves the proposition that drugs have some inherent or peculiar properties which distinguish them from other physical agents in their action on vital elements, so that a law which applies to drugs does not apply to other physical agents.

In Hahnemann's days the mystic astrological halo had not wholly departed from drugs, but at the present time we can only recognize a drug as a physical agent which is subject to physical laws. When applied to the human body it is a force set in motion, which will continue in one direction until its motion is expended. Its action will increase in mathematical proportion to its intensity (or dose).

When Hahnemann speaks of the primary and secondary action of drugs, he states a fact in wrong terms. The "action" is not that of the drug, but of the vital element against which it strikes. The result is a vital action in contradiction to a physical action, and is therefore subject to vital laws instead of physical laws.

The law governing the reaction of vital elements to stimuli may be stated thus:

A maximum stimulus abolishes the functions of the vital element, either completely or temporarily.

A medium stimulus stimulates the functions of the vital element, such stimulation being followed by exhaustion, the result of overstimulation.

A minimum stimulus increases the function of the vital element, and when this element is previously weak such stimulation restores the normal balance and is not followed by exhaustion.

This law is true of all vital reaction to stimuli. The *form* of the stimulus does not vary the effect;

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*Abridged from the *Monthly Homœopathic Review*, February and March, 1896.

it may be a chemical, electrical, thermal or mechanical agent, providing it is capable of stimulating the vital element to which it is applied the result will be the same, viz. an increase or decrease of the functions peculiar to the vital element itself. The nature of this increase or decrease depends entirely upon the intensity of the stimulus, *not* upon its *form* or upon any powers inherent to the physical agent. It is obvious, therefore, that any therapeutic rule or law *must* include *all* agents capable of affecting vital functions.

It is equally obvious that in selecting the degree of intensity of the agents we employ (*i. e.*, in regulating their dose), it is only the minimum stimulus which can be regarded as a pure restorative. In this we have a demonstrable scientific basis for that portion of therapeutics which concerns itself with the action of remedies, whether they be drugs or other physical agents.

The art of the physician is to select that restorative which is capable of stimulating the weakened vital element. It is the law of similars which guides us to this selection.

Hahnemann did not appear to understand the law of contraries as propounded by Hippocrates, and fell into a mistake which has been repeated by every commentator of both schools. He regarded the law of contraries as the antithesis of the law of similars. The law of contraries was supposed by Hahnemann to mean Allopathic practice, and he applies it always in that sense. There is nothing in Hippocrates' law of contraries or his practice which supports the method known as Allopathy. The contrary does not mean the contrary to the symptom, but the opposite condition to that causing the disease. *Contraria contrariis curantur* is simply a direction to the physician to investigate the cause of the disease, and place the patient under conditions of an opposite character.

It is curious that so learned and thoughtful a man as Hahnemann should have fallen into the mistake of supposing that the law of contraries gave support to all Allopathic practice, for, as he himself says: "Only one important part of the medical art was this favored son of Nature (Hippocrates) destitute of, else had he been completely master of his art, the knowledge of medicines and their application. But he did not affect such a knowledge; he acknowledged his deficiency in that he gave almost no medicines (because he knew them too imperfectly), and trusted almost entirely to diet."

This is said of the physician who propounded the law of contraries as a basis of practice, and which law is supposed to give authority to the practice of Allopathy, a method which relies entirely on drugs!

To clear up this mistake it is only necessary to quote Hippocrates' own statement of the law of contraries.

"And it is a most important consideration to determine what is the cause of disease, and what is the beginning and fountain head, as it were, of the evils of the body, for if one be acquainted with the cause of the disease he may be able to supply the suitable remedies to the affections of the body, judging of diseases by their contraries, for the mode of cure is that which is most in accordance with Nature. Thus, for example, hunger is a disease, for whatever afflicts man is called a disease. What, then, is the cure of hunger? Whatever will allay hunger, that is to say, food, and by which the other is to be cured. Again, drink cures thirst, and, moreover, evacuation cures repletion, and repletion evacuation, and rest labor, and labor rest; and, in a word, the contraries are the cure of contraries."

The law of contraries is, therefore, nothing more than a direction to the physician to discover the *cause* of the disease and to remove it. He must, to find the cause, go back to the "beginning and fountain head."

This teaching does not give authority for the use of antipyretics in fever. The contrary to a fever is to be found in the *cause* of the fever, and not in the symptom. This is clearly explained by Hippocrates, who recognized that in the air, climate, and foods the cause of the fever was to be found.

Hippocrates used warm baths in the treatment of fever to promote the action of the skin; the fever itself was regarded as a beneficial symptom.

Warmth is the minimum stimulus of an agent which, used in the maximum, will produce all the symptoms of fever more rapidly and more certainly than any other known agent.

Again, *Aphorisms of Hippocrates*, Sec. V., No. 20, states that cold causes tetanus. The next aphorism is (21): "In the case of a muscular youth having tetanus without a wound, during the midst of summer, it sometimes happens that the affusion of a large quantity of cold water recalls the heat. Heat relieves these diseases."

Throughout Hippocrates' writings we have the use of heat to cool the body, and the use of cold to cause heat. The remedy is selected according to the law of similars, after the cause has been removed, when possible, by the law of contraries.

It is no necessary part of the belief of those who accept the law of similars in the selection of remedies, to dispute the law of contraries, because they refer to different things. The contrary has to do with the causes, the similar with the symptoms.

In most cases we use both; in many cases the removal of the cause is alone sufficient. It is necessary that we should make this clearly understood, and also that our practice is not only based upon the principles laid down by the father of medicine, but is supported by every fact known to physiological science.

Let us state our views in a manner which shows that we recognize both the ancient and modern foundations of the law of similars, and not use a terminology which belongs to the last century, and which on account of its inaccuracy has frustrated our efforts to make the great truth of the law of similars accepted.

In every lecture on the principles of Homœopathy statements are made which involve theories of the "ultra-rational" type.

Thus Dr. Hughes affirms that "vital action which is exclusively topical does not ordinarily conform to the law of similars."

This statement involves the theory that there is one law which governs the effects of drugs acting upon vital elements within the body, and that there is no law at all for those which act on vital elements on its external surface.

The truth is that the practitioner who rejects the law of similars in the choice of drugs for local application puts himself and his patient at a disadvantage.

Dr. Hughes tells us that "the action of arnica in easing pain and promoting the resolution of contusions is a dynamic one; but no such condition can be produced by applying arnica to a healthy part."

This illustrates the unreasonableness of looking at natural phenomena through Hahnemannian spectacles.

There is not a single fact on record, so far as I know, to prove that arnica *locally* applied has the slightest Homœopathicity to a bruise. Arnica given internally, or absorbed through the skin, has a Homœopathic relation to some of the symptoms produced by a bruise, but none to the bruise itself.

To find the simillimum to a bruise it is only necessary to ask the question: How can a bruise be most readily produced on the healthy human body? It can be done by means of dry cupping; that is, by a mechanical act which congests and over distends the blood vessels. If we seek for an agent which will produce similar results of a *minimum* intensity, it will at once occur to us that moist heat, which will distend the blood vessels, is indicated. Therefore, the believer in the law of similars will select a moist heat in preference to arnica for his local application. A bruise may also be produced in a very large number of people by simple pressure of the fingers over the tissue. A believer in the law of similars would therefore be justified in using gentle manual manipulation in addition to moist heat.

If the bruise was a part of the conditions presented, we will say, of a sprained ankle, the law of similars might lead him to use similar movements of the joint to those which produce the sprain, of a very gentle character. He would thus have some certain indications for remedial treatment, which if intelligently adopted would enable him to cure his patient in one-fourth the time which would be occupied by the Homœopathic practitioner who only used arnica externally, simply because it was recommended in the Homœopathic text-books; and any reputation he gained from the success of the treatment would not rebound to the credit of the Homœopathic school, because the leaders of this school refuse to recognize anything but drugs as "Homœopathic" remedies.

Just so with regard to the asserted Homœpathicity of calendula to cuts. We may assume that a very strong extract of calendula would irritate a wound, and that a weaker solution would soothe it. Here its Homœopathicity begins and ends. The same is true of numbers of other vegetable extracts, and calendula occupies a position as the vulnerary elect of the Homœopathic school, not because of its superiority over other agents, not because it represents the "law of similars" in any particular way, but because it is a part of the shibboleth to regard it as a "Homœopathic medicine."

If we inquire into the reputed good effects obtained by the use of calendula as a dressing for wounds, we shall find that it is generally used in the form of a "wet compress." If we study the action of a "wet compress" we shall find that when used in the maximum (that is long continued use over the same part), it is capable of producing both inflammation and excoriation of the healthy skin, and it is, therefore, a true simillimum to such conditions, and is a far more "Homœopathic remedy" to cuts and excoriations than calendula. In making any inquiry in reference to the action of an agent, with a view to determining its application by the law of similars to the treatment of disease, it is necessary to take into account the *method* of its application.

Thus, it would be incorrect to say that electricity produced this symptom or the other. The galvanic or continuous current will abolish sensation in a sensory nerve, and thus cure pain. The faradic or interrupted current will aggravate the pain. The actual cells supplying the electricity may be the same; the variation in result is due to the difference in the *manner* in which the stimulus is conveyed. The Homœopathic practitioner, encouraged by his teachers, will use a strong galvanic current to relieve the pain of sensory nerves in the ordinary orthodox manner. A believer in the law of similars would take advantage of the fact that neuralgia can be produced by means of the faradic current, to use a weak application of this form of electricity as his remedy. The first is antipathic, the second is Homœopathic. The first is a temporary palliative, precisely similar in effect to an analgesic agent; the second produces a permanent cure of the local symptoms. This is one reason why Homœopathic practitioners should be encouraged to practice in accordance with the principles they profess, even if the agent does not happen to be classified as "a drug."

If the practitioner uses a very strong galvanic current he will find that little or no general effect may be produced at the time, but perhaps an hour afterwards the patient may have all the symptoms of a pure neurasthenia. The law of similars may lead him to remember this in the treatment of patients suffering from this condition. He will find that patients who have from any cause to remain in bed for a very long period under conditions of comparative isolation, become physically weak, with a nervous system which is unduly excitable. We meet such disorders in everyday practice; the *repertory* teaches us how to palliate the symptoms but not to cure the condition, but the law of similars should guide the practitioner to their proper treatment, *viz.*, a modified application of the agents of rest and isolation. We can, by the overuse of massage, reduce a patient to a profound state of nervous exhaustion. By a modified application of the same agent we can find a remedy of great value in the treatment of cases of nervous exhaustion which arise from other causes.

I venture to assert that the Homœopathic practitioner, on account of the principles he professes, ought not to use the Weir Mitchell method or any other physical method *empirically*. If he believes in the law of similars, it will guide him to the use of such agents in a scientific manner, so that the treatment is adapted to the state of the individual patient, and not under the impression that the more energetically the remedy is applied the greater will be the curative effect. If the truth of the law is recognized, it provides the practitioner with a light which prevents him falling into the pit-falls with which traditional treatment surrounds him. There is hardly a single point in the practice of what Dr. Hughes calls "Hygiene" which does not require to be re-studied in the light of the law of similars.

When we have removed the cause by the law of contraries, we are free to select the remedy by the law of similars, and as the agent which will produce similar symptoms most readily and most certainly is always the best simillimum, we may often find it in the actual physical agent which has set up the disorder, applied in such a modified form as to make it a minimum stimulus. Thus, if we take a case of frost-bite, the law of contraries directs us to remove the patient from the low temperature which has caused the disease. Having done so we have to select the remedy; the law of similars directs us to the local application of cold. The apparent contradiction presents no difficulties to the intelligent practitioner, and if he acts according to these definite laws he will treat the patient in the way which common experience has proved to be the most efficacious. If we take the case of a patient who suffers from pain and stiffness of muscles, the result of over-exertion, the law of contraries directs us to give rest to the affected parts, so that we may remove the cause. Having done so we have to seek a remedy which will relieve the symptoms. The law of similars will direct us to the selection of an agent capable of causing similar pain and stiffness of the muscles involved.

There are none so certain as excessive exercise or excessive manipulation of the muscles, therefore the law of similars directs us to the use of moderate doses of exercise or manipulation of the muscles, and the symptoms disappear with a rapidity which no drug can accomplish. Here we have the use of apparently opposite agents, rest, indicated by the law of contraries and motion, indicated by the law of similars, both contributing to the same result; all that is necessary is that they shall be employed with ordinary intelligence.

The physician who recognizes that the combined use of agents which are apparently diametrically opposed is necessary to the cure of disease, will also recognize that in a science of therapeutics there must be laws which are also apparently the opposite of one another. The law of contraries and the law of similars are of this character. They have been misunderstood, misinterpreted and misapplied in such a manner that the schools which are supposed to be the particular exponents of the one law or the other, now vie with one another in minimizing the sphere of their application, in order that the field may be wider for that empiricism which appears to be the goal of medicine at the end of this century.

The Homœopathic school is the only body, at present, which claims that a science of therapeutics is possible, but it is paralyzed by the fancied necessity for sacrificing science on the altar of Hahnemann.

My own studies of the law of similars have been purely physiological, and as a result I am prepared to state that the rule *similia similibus curantur* represents a law of Nature, and is of universal application within its own limits. These limits are the relation between the effects of all agents capable of producing alterations in function in vital elements and the symptoms of disease. It is a law which guides the practitioner to the remedy, after the cause of disease has been removed. That the law *contraria contrariis curantur* is also a law of universal application within its own limits, viz., that it is the duty of the physician to seek out the fundamental causes of disease, and to remove them (if possible) as the first act of treatment.

No one will wish to deny the value of the law of contraries applied within its own limits, while the law of similars is rendered indisputable when it is stated as a whole instead of a partial truth, and in terms which are physiologically intelligible.

AN ANATOMICAL THEORY OF SOCIETY.

By J. A. Carmichael, M. D., New York.

(*Continued.*)

FOR the other interpretation of the suggestion of M. Worms, viz., the reproduction of society from scission, we must go back to find the anatomical analogue in the history of the cell, cellulogically and socially considered. Cellulology teaches us that one of the processes for the reproduction and procreation of cell life, is what is called scission or cleavage. The parent cell gives birth to its offspring by parting with a portion of its own body, by the projection from its integral self of a living entity, the duplicate of its own individuality, and which shall inherit its own specific properties. The same may be said of the cell socially considered. The heredity of temperament, with its vices as well as its virtues, is but too often seen in the social system and the cells that make the physical man, project him into the world prepared to grow and flourish in a social atmosphere and soil congenial to his nature, physical, mental and moral, and thus is M. Worms' analogy maintained socially and anatomically. Society is more complex than the organisms properly called, and may be distinguished by the designating title of a supra-organism, thus affording opportunity for further analogies. As we have already amplified the suggestions made by the ingenious argument of M. Worms, they may be extended to still greater length by the consideration of other socio-anatomical relations than those employed by him in his very clever lecture before his audience of scientists and savants at the "Sorbonne." We cannot refrain from expressing our surprise that the distinguished lecturer failed to recognize, or, at least, to declare the socio-anatomical relations so intimately existing between the social cell, man, and his inseparable representative, the gastric cell, his stomach. Once upon a time a wise old Latin philosopher—call him heathen if you like, but all the same it's very astonishing what a prodigious amount of far-seeing wisdom has been handed down to us by these same heathens, and that has served us as a guide in unraveling many a perplexing problem. This old philosopher when the knowledge of anatomy and physiology was yet young and crude, took it into his wise old head that the human stomach was something more than a bag to hold the "olla podrida" that was so often inflicted upon it, and there never was a greater truism uttered, nor one of more universal application to all sorts and conditions of men, than when he described the mucous membrane of the human stomach by the words "Tanquam lerna omnium malorum"—the hydra-headed monster of all evils. How dark is this world, with everything in it shadowed in perpetual and impenetrable gloom, to the poor wretch, ever conscious of the possession of a stomach, and ever grinding out the miserable existence of a dyspeptic. And so, in extending our inquiries into other socio-anatomical relations,it may truly be said that there is not one of them of a more intimate and controlling nature than that held between the social cell—man—and his anatomical cell—stomach. Given a healthy and vigorous stomach, backed up by gross and sensual appetites and passions—society is full of 'em—and a ravening wolf is let loose, seeking whom he may devour, and he finds abundant prey, too! In his "Ode to Varus," Horace, whose moral precepts and virtuous teachings, though promulgated far back in the centuries, are as salutary and healthful now as then, described the evils of intemperance and of abandonment to the pleasures of the table and the indulgence of vicious appetites, desires and practices that distinguished the Thracians, and he characterized them in words full of wisdom and rebuke. In his Sabine villa Horace wrote these words: "Quum fas atque nefas exiguo fine libidinum discernunt avidi."

With both literal and liberal translation they mean: When in the full enjoyment of their unbridled desires, the difference between right and wrong is, in their eyes, but slight, and they easily o'erleap every obstacle to the indulgence of their passions and inclinations. Are not these words of rebuke and of moral suggestion just as applicable to the licensed obliquities of society in this our day and generation, and of our so-called advanced civilization and beasted pre-eminence as the exponents of a nobler life than obtained in those days of Roman voluptuousness and enervating luxury and licentiousness? To-day, the sun, in his diurnal revolution, looks down upon poor, weak, sinful human nature just as he did when the world was young and mankind yet fresh from the creative hand. They who speculate upon the mysteries of the great hereafter, and set themselves up as expounders and interpreters of the coming realities of a future life, must look to themselves lest they stumble against the barrier that stands in the way of human preparation and fitness for so blest a change as they depict as awaiting the shuffling off of the mortal coil, and the putting on of raiments of light and life eternal. Men's minds are balancing, shifting and halting in the doubts and uncertainties that enwrap and veil their future destinies. Their somatic bodies, and the social and worldly pursuits of their lives, are, as we have tried to show, so intertangled and mutually responsive, that the wrench must be great that can free them. Whether we become impalpable dust, and feed and fructify the earth, or as some believe, or say they do, put on some metempsychosic transformation, and still cumber the earth in other, it may be, humbler form, or, again, as others believe, or say they do, be resolved into nothingness of annihilation, yet the question is ever before us in the language of the poet:

"Can storied urn or animated bust
Back to its mansion call the fleeting breath?"

And the answer is ever before us: No! Of one thing we are certain, that nothing short of omnipotence can ever recall the "fleeting breath," or make life, once dead, live again. So, whether a man believe or not in a Creator, there's no future for him when he shall "jump the life to come," if there be no power such as gave him life, to again renew it, when the earth shall be consumed and "the elements shall melt with fervent heat."

The socio-anatomical theory of M. Worms is certainly very attractive, and suggestive of still greater elaboration and consideration than the limits of journalistic privilege will permit, and we take leave of it reluctantly. Much yet remains that might be investigated with advantage from a social, physical, physiological, mental and moral point of view. The influences of our material bodies upon all the conditions of our lives are in constant operation, and we cannot escape from them. Whether the body be sick, or whether it be well, we are in subjection to it, and no man can say from hour to hour whither its promptings may lead him. A jaundiced liver may color the whole world with its own green and yellow hue; a dyspeptic stomach may impel irresistibly to self-destruction; an irritated clitoris may set at nought every precept and practice of morality and self-respect, and finally open the door of a madhouse. The immaterialist and the spiritualist may scoff and scorn the degrading assumption, and hug himself in his psychic and filmy garment. Let him remember that it is but diaphanous at best, and can be seen through. It doesn't need a Röntgen ray to see his liver and his stomach, and all his other appurtenances that minister to his material life, and that impel him socially, physically, mentally and morally.

SOME EARLY EXPERIMENTS IN SERO-THERAPY.

By James Robie Wood, M.D., New York.

(*Concluded.*)

> "Often do the spirits
> Of great events stride on before the events,
> And in to-day already walks to-morrow."

IT cannot be long after the earliest dawn of the twentieth century before we shall be amazed and humiliated by finding that medical thought has long stood helpless at the very portals of great truths, unable to cross their wide and welcoming thresholds. And why? Simply because medical men of our age have been blinded by an invincible ignorance engendered from the unyielding traditions of warring schools, and trammelled by the chains which prejudice has forged. Thanks to a broad and liberal spirit, which is to-day just beginning to replace the narrow and bitter littleness of the past, the time is fast approaching when despised theories will be earnestly and honestly considered by sincere students of medicine, and neglected names of some who instituted so-called absurd laws shall be written high on honor's page.

The wrinkled visage of a once ridiculed idea is seen to-day hidden beneath the habiliments of modern methods and openly espoused under the name of antitoxins.

After twenty-one years of successive, but by no means satisfactory experiments with these same antitoxins of isopathy, I feel in the spirit of prophecy it is safe to declare that antitoxins as now known are but heralds of the cohorts of a surer, safer and mightier therapy which will astound and encourage earnest physicians all over the civilized world during the next three decades of years. Doubtless it will require some time more to clear the medical wilderness of those narrow minds which have heretofore been so potent in blighting medical progress by preventing honest and thorough research into certain seemingly offensive laws, for fear that their adoption might humiliate and revolutionize ancient theories and schools.

During these last years of this nineteenth century, while the transition of therapeutics has been so rapid and bewildering, we have had frequent opportunities of witnessing the amusing spectacle of thousands of severe devotees of schools sneaking in at the back doors of opinions which once they hated. My belief as to what will supplant our modern antitoxins and prove to be the next great forward stride in therapeutics cannot enter here for want of time and space. Its full discussion will be reserved for an article which I hope to complete at my leisure, during this summer of 1896, on "What Will Be the Therapeutics of the Future."

Before resuming the thread of my subject, let me first give a brief summary of what I have already published in the MEDICAL TIMES.

My first experiments began during the winter of 1875, at the Homœopathic Hospital on Ward's Island, New York, where I inoculated a number of healthy rabbits with tubercle from human sputa, and from those rabbits prepared a serum which was immediately introduced into patients suffering in advanced stages of tubercular disease, by hypodermic injection, also through abraded surfaces, as is done in vaccination. Thus began in 1875 probably the first trial of serum which had been carried through living lower animals. To the old hospital on Ward's Island belongs the honor of sheltering the first patients upon whom the earliest known experiments in sero-therapy were ever made. Of all the subjects thus treated, one only improved after the injection of the serum. This patient rapidly and markedly evidenced the possibility of returning to health; but as the case stood alone, it could not be accepted as certainly a result of the serum, especially as the patient had other treatment at the same time.

After many vicissitudes and doubtful experiments, extending over a series of years, I turned my attention to the same line of treatment applied to cancer. In the paper preceding this a case of mammary cancer was cited, which was undoubtedly benefited for a long time by the direct application of cancer serum, its large ulcerated surface healing in a surprisingly short space of time. The cancer serum used in that case had required nearly three years to prepare. As the patient, after some years of comparative comfort, finally succumbed to the disease, which had meanwhile attacked the lung of the same side, I considered my material faulty, or else that the curative principle was only temporary in its effect Disappointing as was the result, it certainly compared favorably with surgery, as the period of immunity was as long and far more comforting; moreover, the last stages of the renewed disease were free from acute suffering, so common to its return after surgical interference.

The point which struck me as worthy of consideration, after treating a number of similar cases situated in other localities, was the apparent fact that while serum prepared from cancer of the breast arrested, for the time at least, the progress of a cancer affecting the same organ, perfectly healing an extensive and deep ulceration which had destroyed a considerable portion of the breast, yet it had no appreciable influence upon other organs or tissues similarly affected. In vain was the serum applied to malignant ulcerations of the throat, neck, rectum and other localities which had from time to time come under my care.

It is needless for me to give wearisome and long details of my numerous failures with the serum. The later cases were all unsuccessful, or, at best, very poor palliation followed the treatment. I do not intend to make statistics and try to prove the reasons of each result, so as to seek unearned glory for my serum or myself. It has been said that "there are three kinds of lies, to wit, lies, d—— lies and statistics." Of all kinds medical statistics take the superlative degree, especially in antitoxin reports.

With the solitary exception of the case of cancer of the breast, in none of my cases was any benefit worthy of the name realized. I sought other cases of malignant ulcerations of the breast, but found none, hoping by renewed trials to determine whether or not serum taken from malignant disease of any organ or tissue is beneficial only when applied to the same character of organ, tissue or locality. Some cases of malignant disease of the mammary gland came under my observation; but as no ulceration had begun I dared not risk an application, lest harm should follow through mistaken diagnosis. So I prepared to gather material for future use from other organs and tissues, hoping thereby to prove that identity of constitution and locality, as well as of disease, were essential factors in isopathic therapeutics. Using my preparations on patients with advanced disease only of tubercle and cancer were unfairly severe tests of their curative action; but I would not hazard application in more hopeful cases. To-day I am thankful that my rule in this respect was firm and constant, for I verily believe, and think that I may be able to substantiate my belief, that means will soon be at hand possessing great therapeutic efficacy and almost absolute safety, which cannot be said of the antitoxins of identity, with which I have so vainly struggled for more than a score of years. Would that I could begin again, with the vigor and earnestness of renewed youth, having also my present possession of a strong conviction that our recent forms of antitoxin are more useful as guideposts along the roads leading to a higher therapy than for any inherent curative value of their own.

If justice be done, when certain ideas are fully developed, which, of necessity, they are bound to be at no distant day, one name in medical history will shine out with greater brilliancy than any other from Hippocrates down to the present day, not from any suggestion of the exact character of that coming therapy so much as the directing influence of a law by him enunciated and ably defended; a principle which in good time will prove more far-reaching and of greater diversity of application than any other law ever promulgated. It will surely lend a great and enduring foundation stone to the medical superstructure which is about to be builded with perfect stones gathered here and there from among the therapeutic debris of ages. Ancient and modern schools and theories, some of which are forgotten or misunderstood, or wrecked by the errors and obstinacy of pretended friends, each and all will bring offerings, from unpretentious bricks to splendidly hewn columns, wherewith to add strength, grace and grandeur to the glorious temple to be erected during coming generations, wherein the suffering sick, through the mercy of God and the noble efforts of man, may not supplicate in vain.

Let me now give a brief outline of some of the plans and procedures adopted, or which have suggested themselves from time to time, whereby I hoped to prepare a safe and efficient serum. Although now having doubts as to the value of antitoxins in their present forms, yet, as I may be mistaken in regard to their endurance as therapeutic agents, I offer my contribution to their literature, hoping that some brighter and clearer head may find useful suggestions even in my uncertain foot prints.

The very numerous propositions considered during my twenty-one years of apparently fruitless experimental work compel me to present a bare outline of a few only of my methods. After a time, I seriously considered the advisability of discontinuing the intervention of living animals in preparing material for injection, seeking substitutes in several other menstrua.

First: I prepared serum by carrying the supposed cause of disease through living animals. These experiments began in 1875.

Second: Rapid fermentation of morbid matter in a liquid menstrum.

Third: Slow fermentation of the same, extending over a period of several years.

Fourth: Rapid decomposition of diseased tissues by chemicals, such as ozone, chlorine, sulphurous acid, etc.

Fifth: Combinations with antiseptics, and, thus guarded, introduced into the system.

Sixth: Subjecting diseased matter to different degrees of heat and cold, such as freezing, boiling, and even burning the mass, and employing the ash.

The question could not be answered satisfactorily as to how much septic danger could thus be lessened without destroying all curative power. The bacilli not having been determined in those early days, it would have been impossible to accurately note the effect of such measures upon the cause of infection. Indeed, we are very far from this wonderful ability even at the present day, although it may seem treason to utter such a doubt. When we stop to think as to who can offer more than the merest conjecture as to what is the infecting principle in any disease, our pride is hushed with the awful certainty that there is much we shall never know about human maladies this side ot eternity.

Seventh: I next considered feeding insects, fish and reptiles upon material from various diseases, or injecting such morbid matter into their bodies. For I thought that if living things were selected they should be as far removed from similarity to man as possible. The same was carried farther by going lower in animal life, and subjecting various diseased tissues to the action of the larvæ of flies, and after a sufficient amount of the diseased flesh had been consumed, to obtain a serum from the larva, hoping that its process of digestion might have changed the character of the infective material. In some cases it was considered better to await the higher development of the larvæ before preparing the serum.

Eighth: The vegetable kingdom was thought of, imitating the quaint idea of an old physician of injecting plants of a suitable character with solutions of diseased tissue, and depositing portions of the same material close to their roots. Also to cultivate certain seed in a soil combined with diseased flesh, in hopes that the developing plant might possibly be permeated with some curative power while growing amid such poisoned surroundings.

Ninth: This is the last that I shall here describe, and the one which I believe to be most important; that is, rapid and slow putrefaction of sections of disease infected flesh, either directly from the dead or living body, or by contact with various septic influences, such as sputa, excreta, etc. This may have more possibilities than at first glance appears. It is well known that some of the most valuable antiseptics have been evolved by prolonged decay. What has been accomplished in this way upon and under the earth's surface should be imitated by artificial means; thus putrefaction may be hastened on to purification. This action of decay in destroying infected tissue will be referred to more extensively in another paper on a different subject.

Shapeless, clumsy and aimless as these experiments may appear, they were the best that entered my mind, and were not one whit more absurd than those considered by others, whose results have been announced without a description of the processes by which they were reached. Did we know all the measures through which men have sometimes blundered to complete success, we might be very much amused at the final exceedingly scientific description of those processes. It is mighty humiliating to tell the whole truth at all times. After all, success alone succeeds.

> "It is success that colors all in life.
> Success makes fools admired, makes villains honest.
> All the proud virtue of this vaunting world
> Fawns on success, and power, howe'er acquired."

Earnestness, perseverance and vigor must be the constant companions of those who intend to explore the dark and unknown paths of medical research; but let such seekers after truth beware of enthusiasm, for it is a most dangerous ally, especially in medical science. Its beclouding influence is frequently observed in the reports of different antitoxin cures. Experimenters' enthusiasm has doubtless added a curative force to every drop of serum injected, which, alone, it would never have developed. So it is all important to keep a just and watchful doubt seated in judgment to examine supposed cures by any pet theory of our own or of others. Had I not gone through these many years in constant fear and doubt, I might have been enabled to-day to fill pages with marvelous accounts of restorations of hopeless invalids to health and strength. Enthusiastic confidence makes sad havoc with reports of the remedial action of drugs; and he who is seduced by the brilliant records of certain marvels of healing will endorse or reject, according to the measure of enthusiasm that he may lend to such remedies.

For the present I shall close my papers on sero-therapy. When I return again to the subject, it will be with an account of what I believe are to be the more powerful antitoxins, as we shall find them by swerving away from the deep rut that the newborn isopathic therapy has made. I do not ignore, nor do I condemn, the law of isopathy, for it may yet be developed in a remarkable manner, and we, who hesitate to applaud the crude form in which it has reappeared in our day, may yet return to its allegiance. But I firmly believe that its master, the latchet of whose shoe it is not worthy to loose, is even now approaching our doors, and may soon knock loudly for admittance. What I conceive that master law to be, I shall in good time offer for criticism. Thank God, the judgment of men to-day is far more just and at the same time more watchful than it has been in any previous medical age.

Although I began this series of papers with the words: *Ego ipse feci*, in view of the fact that, however poorly the harvest has yielded to my cultivation, as I came first in the field, it is but fair for me to close with the phrase: *Illi etiam fecerunt.*

THE COMMON GROUND.*

By Edwin M. Hale, M. D., Chicago, Ill.

Chairman Section on Materia Medica and Therapeutics, American Association of Physicians and Surgeons.

I APPRECIATE the honor conferred on me by the American Association of Physicians and Surgeons, composed as it is of representative men of all schools of medicine.

The chairmanship of this Section of Materia Medica and Therapeutics is particularly grateful to me, because those subjects have been my favorite study for more than forty years.

I take it that the object of this Association is to combine the best thought and experience of the various schools, and smooth away the obstacles which seem to lie in the way of a union of apparently conflicting theories and practice. I have for many years believed that there was no real need of several schools of practice, any more than there is need of several sects in religion.

There is surely no reason why there should not be a common ground whereon all sects in religion and all schools in medicine could amicably meet. I have always considered myself a Homœopathist in all the essentials of that school, but this has not prevented me from believing that there are other therapeutic methods not based on Hahnemann's law.

Similia similibus curantur is a good rule for the selection of medicines in certain doses and under certain conditions, but I voice the belief of a majority of our school that this law has its limitations. I will give a few illustrations of the conditions wherein this law is applicable.

It is applicable when, in cases of functional disorder, the symptoms of such disorders closely resemble the symptoms caused by some drug.

Hahnemann seemed to limit this law to the primary symptom of a drug, because he advised against the use of secondary symptoms. This is a fundamental error, for the secondary symptoms of a drug are just as important as their primary. If we were limited in the selection of a remedy to primary symptoms, we would not be able to use nux vomica for paralysis, podophyllum for constipation and hepatic torpor, or aconite for fever. The fact is, that nearly all Homœopathists do utilize both primary and secondary symptoms, but not as successfully as they might.

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* Read at the meeting on June 23, 1896.

The reason is this: They do not all seem to be aware of the fact which I have taught and verified in practice for many years, that the dose should be small—minute—when given for the symptoms of a disorder which resemble primary drug symptoms, and should be larger—more material—when given for secondary symptoms.

For example, when nux vomica is given for spasmodic affections the dose should be minute, and when given for paralysis the dose should be larger, or just sufficient to cause normal physiological action. I see no reason why all candid, thoughtful physicians cannot agree on this point.

One limitation to the law of similia is that it does not take into account the abnormal chemical conditions which occur in the human body. We have no strictly Homœopathic medicine which will remove or neutralize an excess of uric acid in the blood and tissues; nor have we any which will sweep out or neutralize the ferments which take place in the intestinal canal, or prevent and destroy the poisonous ptomaines which form in the intestines. As well might we try to disinfect and purify a sewer by throwing into it a few grains of some drug.

We cannot successfully combat some diseases except by the use of mechanical or chemical agents. Then again we must in many cases use drugs for their pure physiological effects, without any appeal to their symptomology. I find this to be the case in the treatment of structural disease of the heart. While I admit that all such cardiac diseases are simulated by the secondary effects of cardiac poisons, there are few if any symptoms to guide us. Such cardiac medicaments as digitalis, strophanthus, convallaria and cactus must be used as mechanical and physiological agents. In hypertrophy with dilatation, or muscular atony of the heart, they act on the nervous and muscular structures of that organ as pure stimulant and tonic agents. We must give them for *conditions*, not for symptoms. To give them in attenuated doses in such conditions would be as foolish as to try and lift a ton's weight with a straw.

I hope this Association will pardon the brevity of this paper, but it may serve as a text for a broad and healthy discussion.

I sincerely hope that during my lifetime I shall witness a broader liberality of all medical schools toward each other, and a breaking down of the walls of sectional intolerance.

BENEFITS OF THE BATH.

ITS HYGIENIC VALUE AND PHYSICAL PLEASURE TOLD BY DR. EDSON.

"The hygienic value of the bath to people in ordinary good health is very greatly increased by a most vigorous rubbing," writes Dr. Cyrus Edson in discussing "When and How to Bathe," in the June *Ladies' Home Journal*. "With the flesh brushes and gloves, the rough Turkish towels and other appliances—one of the most valuable is the narrow band of toweling—this can be administered with the greatest ease, and it should always be thorough—in fact it is difficult to overdo. Its effect is to stimulate the reaction from the bath, and bring the vessels and nerves of the skin into a healthy, vigorous condition. One of the most valuable baths to those in whom the organs of the lower part of the trunk are weak, is the hip bath. In this the bather is seated in the bath, and the water covers the body as high as the waist. If the water be cold, that is, if we desire to stimulate the organs by the shock, a towel, wet with cold water, must be folded turban-wise on the head. The duration of the bath is from fifteen to twenty minutes, and its effect is immediate. The baths excite the vaso-motor nerves of the abdominal organs. Their use should be prescribed by a physician. As long as the result of bathing is not to weaken the bather, we can practically say a person cannot, when in health, bathe too much. I have spoken of the hygienic value of the bath, but I have said nothing of the physical pleasure to be derived from it. Every one knows the delicious feeling of cleanliness, the glow of the skin, and the general sense of robust health which follow a good bath. What is more delightful than the exhilaration of a swim in salt water? These results are a part of the experience of all, but it must not be forgotten that in these very physical pleasures there is a distinct hygienic effect."

THE SECOND PAN-AMERICAN MEDICAL CONGRESS.

The Committee on Organization of the Second Pan-American Medical Congress has announced November 16, 17, 18, 19, 1896, as the date of the meeting to be held in the City of Mexico.

The most cordial invitation is extended to the medical profession of the United States to attend and participate in the meeting.

Those who contemplate attending should send their names and addresses at as early a date as possible to Dr. Charles A. L. Reed, St. Ledger place, Cincinnati, that the committee in Mexico may be advised of the probable attendance.

Commenting upon the resignation of Dr. Cyrus Edson and the expulsion of Dr. Edward C. Mann from the Medical Society of the County of New York, the *Journal of the American Medical Association*, in a recent issue, makes the following astonishing statement:

> It would appear that there has been sudden and unlooked for stimulation of the ethical conscience of a body that has for ten years or more been in affiliation with the "no code" State medical society. We trust that the change of heart is deep, sincere, and not based on any alleged approaching bankruptcy of the New York profession. * * * The quickening of ethical conscience in the Society, whereby professional honor is appealed to by many who have heretofore objected to any ethical rules, shows clearly enough the absolute necessity for rules of some sort. "No code" may be extremely interesting as a theory, but it invariably has commercialism as its underlying basis.

This proved a sufficient reason for the *Philadelphia Polyclinic*, in its issue of December 14, 1895, to propound the following conundrums, which, in the vernacular of Dr. De Wolf Hopper Syntax, may be termed "corkers":

> We should like to ask the *Journal* in all sincerity the following questions: First, is the signing of certificates of nostrums by a member of the New York County Medical Society, a no code institution, more culpable than similar action upon the part of a member of the American Medical Association? Second, is there any provision in the constitution or rules of the American Medical Association by which one of its officers who violates its code of ethics can be disciplined by the Association itself in the absence of action upon the part of his local society?

We may with propriety add: Is it a greater moral crime against ethics to be a member of the Medical Society of the State of New York than to advertise in the various journals that one is prepared to go to any part of the county to do any sort of professional consulting or surgical work? We wait with some interest the *Journal's* answer to these pertinent questions.—*Buffalo Med. & Surg. Jour.*

The New York Medical Times

A MONTHLY JOURNAL
OF
MEDICINE, SURGERY, AND COLLATERAL SCIENCES.

EDITORS:
EGBERT GUERNSEY, M.D. ALFRED K. HILLS, M.D.

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REMOVAL.

The office of this Journal was removed, May 1st, to 180 West Fifty-ninth street, Central Park South.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 19 Liberty St., N.Y.

A LESSON IN PSYCHOLOGY.

AN attempt has been made within the past few weeks, in the Recorder's Court in this city, aided by unlimited resources of time, money and skill, to solve the problem of what was believed to be a murder, but which has resulted simply in unfolding line by line a psychological picture such as has seldom been seen in any court of justice, or in any department of life. A woman is accused of poisoning her mother, and listens for days and even weeks to the minute details of the act, which, if traced to its source, must send the doer with unerring certainty from the prison cell to the electric chair. Day by day she hears the revolting testimony of her mother's murder, the agony of her dying hours, and sees the effect of the poison upon the mutilated remains of her own mother, hears and sees all this with no tremor, with no tears, with no looks of agony upon the blanched face as one damning proof of murder after another is brought out with unerring certainty. Who is there, with a conscience, possessed of any feeling of honor, shame, or of true affection, could have passed through that terrible ordeal, lasting not merely for a few hours, but for days and weeks, with all the time the terrible shadow of the electric chair hanging like a black cloud over the court room, without one sign of fear, but ever with a smiling face, and an apparent keen enjoyment of what seemed to be merely a play, in which she posed as a central figure? History is full of incidents of the hero and the martyr facing death without a tremor, and even with a smile and a look of exultation. But Mrs. Fleming was neither a hero nor a martyr. She was simply a sensual animal in a human form, with scarcely a trace of conscience or of any moral sense. Her life history shows her to be the offspring of one of the worst forms of sensual passion, having no kinship with true love, and without even sexual conscience.

Julian Hawthorne has outlined her life's motives in a few graphic words: "A woman of this stamp remains inwardly an animal, despite such outward polish as the contagion of our civilization may operate upon her. She is not a savage animal, but she is selfish, improvident, fond of being caressed, attached to the offspring of her body, impassioned towards her mate of the moment, but fickle, incapable of strong or excited feelings of any kind. She desires ease, flattery, and smoothness of circumstances, because she is luxurious, vain and indolent, but to attain these pleasures she will trust to luck, instead of depending upon exertion or self-denial. She does not love—she fancies; she does not hate—she dislikes; adversity annoys her and puts her out of temper; it never moves her to tragedy or despair. She never discovers anything really serious in life. She ripples along on the surface of the stream; she never suspects, still less sounds its depths. She imagines others are as she is; nobody is in earnest; all is a drama in which puppets perform a part more or less pleasing. Test her with any searching and genuine emotion and she, as it were disappears; physical sensation is all she knows or can understand."

Such a woman is not a person to commit murder. That would involve too much labor, too much thought, too much planning and reasoning to be entertained for a moment. She is simply an animal in a human form, with neither strength of will or sensual force for any strong exertion or for any violent, long sustained passion. Her conduct in the court room was just what might be expected of such a person. Conscious of her innocence, all the rest was a play. She seems just one of those types of being which, in the process of reincarnation through the ages, may not only have ceased to advance, but have even turned backward toward the brute creation from which we sprung, with such an impelling force as to carry her into that annihilation in which human identity is lost as it mingles and becomes a part of the great ocean of life. Is the psychological lesson, wrought out through weeks of unremitting toil, in which the details of sensual vileness and murder have been carried to hundreds of thousands of households, worth the effect produced upon innocent minds and the $40,000 which the city must pay for unearthing all this vileness? We are confident an intelligent community will fully endorse the justice of the verdict. They may question, however, the strength of the theory which led to the prosecution.

THE SANITARIUM TREATMENT OF THE INSANE.

WE have received a very suggestive monograph upon the above subject, by Dr. W. F. Robinson, of New York. He believes a large class of patients can be treated with much greater success in a well equipped sanitarium than in an asylum or at home. This, however, is expensive, and can only be used by those having an abundance of means. The cases should be carefully selected and all the conditions minutely carried out. Speaking of the mental condition of the insane and the necessity of taking special notice of each peculiarity, he says: It must not be supposed that a person who has lost reason has lost it all. On the other hand, these patients are extremely rational in many ways. They not only think, but think a great deal. It is the will to direct and the judgment to control that is at fault. They have ideas enough, but the mind is so warped that they are not properly interpreted, and the deductions from them are, therefore, false. As a result of this, the patient very soon finds himself out of touch with those about him. Then he loses interest in what is going on among his friends and in the world at large. He becomes more and more shut up within himself, until finally he ceases to react at all to any of the stimuli of external life. A mind in this condition grows weaker and weaker, through lack of exercise, until the inevitable result—dementia or loss of mind—is reached. If these unfortunates can be brought out of themselves and made to take an interest in something, they may be saved.

It follows as a corollary, from what has gone before, that mental treatment is of great importance in these cases; indeed, the success or failure of the method depends upon it. The keynote of this treatment is as follows: Treat the patient as if he or she was sane. In other words, in your intercourse with them ignore the whole insane fabric entirely; when they utter their delusions, or talk nonsense of any kind, either ignore it, or treat it as if it were sense. This method of treatment would be impossible for any one to carry out who was not familiar with the insane. Patients may be reasoned with, but never about their delusions.

PHTHISIS AMONG THE INSANE.

IN the April issue of the *State Hospital Bulletin* we find a very interesting article by Dr. George Allen, of the Middletown State Insane Hospital, showing that with proper care the percentage of deaths in insane hospitals need not be greater than in private houses. Dr. Allen quotes from Dr. Babcock's article in the "Transactions of the American Psychological Association" that tuberculosis is two or three times as common in institutions as in the general population, and that the prevalence of the disease may be regarded as a test of the sanitary condition of the hospitals. In the City of Middletown, where the hospital is situated, there were in 1890 in each 1,000 deaths 102 from consumption, while in the hospital, during the same period, there were only thirty-three to each 1,000 deaths. To secure these results, not only the wards, but the entire buildings, have been made as antiseptic as possible. The basement is from time to time sprayed with some antiseptic solution, and the floors of the wards washed with hot water and carbolic soap. The floors dry speedily, and bacillus from dried sputa are effectually removed. Milk is used in abundance, and generally given hot. Thorough ventilation of the wards, the utmost cleanliness of the person, and rest in the incipient stages of bronchial troubles are great factors in keeping up the vitality necessary to resist acute troubles. Consumptive patients are isolated as much as possible, and the walls of the room, in cases of death, are rendered thoroughly antiseptic. It is evident from the facts stated by Dr. Allen, that, with proper sanitary regulations, there is no more danger from phthisis in a general hospital for the insane than in private houses, and possibly even less, from the fact that in private houses there is generally less attention given to antisepsis than in public institutions, where all the officers are supposed to be fully versed in the most advanced ideas of hygiene.

STRYCHNINE IN PULMONARY CONSUMPTION.

DR. THOMAS I. MAYS has an exceedingly interesting article in the May issue of the *Am. Med. Surg. Bul.* on the use of strychnine in consumption. The doctor's reasoning and conclusions are along the same line as those of Hahnemann, and are reached by the same experiments of the action of the drug on the human organism. It is admitted that the action of strychnine is specially upon the moto-nervous system, and also to a certain extent upon the peripheral sensory nerves. Given in small doses it, like almost every other drug, stimulates those organs upon which it has a special action; in medium doses it tetanizes, paralyzing the nervous system when given in large doses. Dr. Mays compares the action of strychnine to a cone, one side of which, from the base to the apex, represents the stimulant side of its action, the apex its tetanic action, while the opposite, from the apex to the base, its paralyzing action. The effect sought to be obtained by the drug is to impress the nervous system with its full stimulating effect, leading up gradually, as near as possible, to the apex of the cone or danger point, but instantly diminishing the dose if that point is reached. As the toleration of the drug is in no two cases precisely alike, the author recommends commencing with the 1-30 grain four times a day, continuing for a week; then perhaps 1-24, continuing for another week, diminishing the dose instantly if symptoms show we have reached the tetantic action, or the apex of the cone. The physician may follow the suggestion of a long continuance of the drug, instead of frequently changing with the slightest symptomatic variation, with advantage.

HAHNEMANN OR HIPPOCRATES?

IN this year of "The Master's" glorification, it was interesting to read, in a Homœopathic journal, such an article as that by Dr. Percy Wilde, of which an abstract is given on another page. Here we have a prominent writer and practitioner of the new school, arguing—with at least no small amount of learning and ingenuity—that its founder adopted and forced upon its followers "A false interpretation of the law of similars," while he was equally at sea in his understanding of the law of contraries, as prepounded by Hippocrates! If Dr. Wilde is correct (and Dr. Hughes, in his brief rejoinder, does not venture to contradict him). it would almost seem as though that $70,000 monument, which, doubtless, will soon adorn our capital, ought in justice to bear the name and effigy of the Sage of Cos, rather than of the German enthusiast who borrowed his ideas, and narrowed them to suit an exclusive and one-sided hypothesis.

EVERY spring and summer the great ocean steamers are crowded with tourists seeking health from foreign travel. An ocean voyage and a few days spent among the scientific and art centers of Europe is always pleasant, brightening the mind and sometimes strengthening the body. In this connection a glance at the annual death rate of European countries in comparison with our own may be not without interest, and possibly influence, to a certain extent, old European travelers to give a little more attention to their own country.

The death rate in France is said to be one in thirty-two; Prussia, one in thirty-nine; Norway and Sweden, one in forty-three; Austria, one in forty; Denmark, one in forty-five; England, one in forty-six. In our own country the death rate in the Gulf States is set down as one in sixty-two, and in the other Southern States one in seventy; Mississippi Valley and Atlantic States, one in eighty; Western States, one in eighty-one; Pacific States, one in one hundred and fifteen, and Northwestern States one in one hundred and twenty.

We are glad to see the formation of clubs of pleasant people in quiet and healthy localities, both inland and by the seashore, where congenial society, with plain but healthy living, can be had at a fair price. Free from the excitement and dress of large watering places these clubs are in the truest sense of the word resting places, resting and refreshing body and mind.

THE SAUCY CHARGE of M. Paul Bourget, in his recent work on America, published in the New York *Herald*, that society in New York spent its leisure time in looking up their grandparents, called forth the retort from Mark Twain that in this they differed from the French, who spent most of *their* time in looking up their parents. This clash of wit has directed the attention of the *Medical Record* to statistics which show a decrease of marriage in France and a very much larger percentage of illegitimate children there than in America. Twenty-eight per cent. of Parisian children, says the *Record*, are illegitimate, and out of every 100 families thirty-three have no children, unless they are still born. Out of 60,000 babes born in Paris yearly 20,000 are sent out to nurse, and of these 38 per cent. die the first year. These startling facts look to a gradual withering of national life and strength, and in process of time a slow but sure extinction of national existence. M. Bourget's sneer is more than offset by Mark Twain's spicy rejoinder, and the *Record's* array of sharply telling facts.

RESPIRABILITY OF VITIATED AIR.—The breathing of air in which a candle flame will not burn is generally considered dangerous. In a paper by Mr. Frank Cloues, read before the British Association at the Ipswich meeting, the results of some interesting experiments were given. It was found that the flames of ordinary candles and lamps were extinguished by mixtures which contained, on an average, about 16.5 per cent. of oxygen and 83.5 per cent. of the extinctive gases. A flame of coal gas, however, required for its extinction a mixture still poorer in oxygen, and containing 11.3 per cent. of oxygen and 88.7 per cent. of the extinctive gases. These results have since been confirmed by a different method, which consisted in allowing a flame to burn in air inclosed over mercury until it was extinguished. The remaining extinctive atmosphere was found to be practically identical with that previously obtained from the artificial mixtures. An analysis of air expired from the lungs proved that it was also of the same composition as that which extinguished the flame of an ordinary candle or lamp. The average composition of expired air and of air which extinguishes a candle flame is as follows: Oxygen, 15.9; nitrogen, 80.4; carbon dioxide, 3.7. Now an atmosphere of this composition is undoubtedly respirable. Physiologists state that air may be breathed until its oxygen is reduced to 10 per cent. The maximum amount of carbon dioxide which may be present is open to question, but it is undoubtedly considerably higher than 3 per cent. Dr. Haldane maintains that the above atmosphere is not only respirable, but would be breathed by a healthy person without inconvenience of any kind; he further states that no permanent injury would result from breathing such an atmosphere for some time. The conclusion to be drawn from these facts is that an atmosphere must not be considered dangerous or irrespirable because the flame of an ordinary candle or oil lamp is extinguished by it. The popular notion about such an atmosphere might often deter one from doing duty of a humane or necessary character.

A SIGN OF DEATH BY EXHAUSTION FROM INSUFFICIENT NOURISHMENT IN YOUNG CHILDREN.—According to the Berlin correspondent of the *Medical Press*, Dr. Seydel asserts that in all cases in which death is brought about in young children by insufficient nourishment, total disappearance of the thymus gland is an invariable phenomenon. Whether this disappearance may not also be brought about by exhaustive diseases, such as fevers, requires further observation. It is to be accepted as probable, as the thymus gland must be looked on as, to a certain extent, a reserve material, and it is highly probable that it is drawn upon to supply nutrient material that may be wanting. Where organic changes are absent, and where on section of emaciated children there is absence of the thoracic glands, it may, according to the author's observations, be taken as a more certain sign of exhaustion by deficient and unsuitable nourishment than narrowing of the lumen of the intestine, which, in point of fact, is, as a rule, not present.

ENURESIS.—Dr. Mac Allister, in the *Dublin Journal*, claims that the reason why atropine, which is so often given in enuresis, fails in so many cases is because it is not pushed up to its drug action, viz.: great dryness of the throat and dilated pupils. He described the case of a boy fourteen years of age, who was given five drops of a mixture composed of:

Liquoris atropine sulphate,.............. ʒ iss.
Liq. strychnine hydrochlor.............. ♏ 45
Syr. aurantii, ad........................ ℥ i.

at 9 P. M. Instructions had been given to take no fluid after 6 P. M., and to pass water at 10 and again at 6 A. M. This dose was continued for three nights; then 10 drops for the next three, and 15 for the next three, and so on till 30 drops were taken for a week. If then the cure was not complete the dose was increased by 5 drops every three nights till 60 drops had been taken, and then diminished by 10 drops every three nights. Given in this way Dr. Mac Allister considers the drug a specific. We should recommend that the physiological effects of the drug be carefully watched. Electricity and massage of the lower part of the body, with free bathing with cold water, will often accomplish a cure even more promptly than atropine.

THE Second Pan-American Congress will be held in the City of Mexico, Nov. 16–19, 1896. The most cordial invitation is extended to the medical profession in the United States to participate in the discussions. At no time could the City of Mexico be visited with more pleasure and profit than on the dates chosen for the meeting. The zeal and enthusiasm of the Mexican Government are co-operating to make the Second Pan-American Medical Congress attractive, important and memorable.

SIESTA AND DIGESTION.—The question has very often been raised whether rest after a meal is favorable to digestion. Some persons cite the example of animals who lie down and go to sleep after eating, while others claim that sleep during digestion makes the mind sluggish and predisposes to apoplexy.

M. Schule, of Fribourg, has endeavored to solve the question by chemistry. In two cases where the stomach was normal he removed the contents and analyzed them a few hours after meals followed in some cases by sleep and in others by simple rest in a horizontal position. According to these experiments the regular effect of sleep is to lessen the power of contraction of the stomach, while the acidity of the gastric juice increases; on the other hand, rest in a horizontal position stimulates the motion of the stomach without increasing its acidity.

The inference is that it is well to rest after eating, but without going to sleep, particularly when one is affected with a dilated stomach or with hyperacidity of the gastric juice.

TEST FOR THE HUMIDITY OF HABITABLE APARTMENTS.—A sanitary writer for the *Herald* says: "Physicians are sometimes requested to estimate the relative dampness of an apartment or room. This is not always easy by simple inspection, as a room may be damp, although saltpetre does not grow on its walls or mold in its corners. The following is an exact means of appreciation, and one that is within every one's scope: In the room in question a kilogram of fresh lime should be placed, after heremetically closing doors and windows. In twenty-four hours it should be weighed, and if the kilogram has absorbed more than 10 grains of water (that is more than 1 per cent.) the room should be considered damp and closed as unhealthy.

The dampness of dwellings is due to internal or external causes. There can be no doubt that a new building ought to be treated for a certain length of time by ventilation and heat, with a view to evaporating the really enormous amount of water incorporated with the building materials. When this evaporation has been effected great care should be taken in insuring proper drainage for rain and other water.

THE PRESERVATION OF ORGANIZED URINARY SEDIMENTS.—It is often desirable for purposes of instruction or demonstration and for comparison at different times in the course of a case of nephritis to be able to preserve any organized sediment which may be present in the urine.

This, according to Fischel (*Prag Med. Woch.—Med. News*), may be accomplished by washing the sediment two or three times with normal salt solution, best with the aid of the centrifugal machine, and preserving it in equal parts of glycerine and water, to which a little (about 2 per cent.) saturated alcoholic solution of thymol has been added.

Sediments treated in this way preserve their structural character indefinitely, and may at any time be mounted for study with the microscope by simply placing a drop of the mixture on a slide, covering it, and preventing evaporation by a ring of varnish.

METHYLIC ETHER AS AN ANÆSTHETIC.—In a recent address to a medical society Sir B. W. Richardson expressed a strong opinion that the real danger of chloroform lies in the chlorine atoms in the molecule. Methylene bichloride was said not to be so dangerous, because it contains one atom less of chlorine; but the point to aim at is to get rid of the chlorine entirely, and he believes the ideal anæsthetic is methylic ether ($CH_3O.CH_3$). This body is unfortunately a gas, but it has remarkable properties. It is almost thirty years since Sir Benjamin first mentioned it, and his opinion of it is still high. Patients who inhale the methylic ether are quite insensible to pain, but so conscious that they are able to obey every request asked of them, and are mentally active. One patient who sat for the extraction of two teeth selected the tooth to be first extracted, putting her finger to it, and afterwards rearranging her position for the second removal. To the looker-on it seemed as though no change in her life had occurred, yet she affirmed that she was sensible of no pain whatever. The gas can be easily liquefied, and would be readily available in that condition.

MODIFIED ETHER ADMINISTRATION—Dr. David H. Ludlow, of Denver, suggests in the *Philadelphia Polyclinic*, that if ether is mixed with twice its volume of a bland, light preparation of liquid petrolatum and thoroughly nebulized with a suitable atomizer, it is absolutely unirritating, and even with a much smaller proportion of oil is practically so. A few puffs of the mixture being sent from the atomizer directly into the nostrils, before administring ether in the usual way, the anæsthetic is taken easily, with no stage of excitement, and with none of the common annoyances incident to its use.

A NEW SIGN OF EARLY TABES.—Dr. James J. Putnam writes in the *Boston Medical and Surgical Journal* that "in a patient with tabes, it is often possible to flex the leg at the hip without bending the knee until the toe almost touches the ear, without producing the sense of painful tension in the popliteal space so speedily felt by one in health. This is not only an interesting feature of advanced cases, but is a valuable early diagnostic sign."

POISONING BY ANTIPYRINE.—A correspondent of the *British Medical Journal* calls attention to the danger attending the amateur administration of antipyrine, and describes a case in which a dose of 10 grains produced very alarming effects. The writer remarks that since antipyrine is undoubtedly a dangerous drug, the careless and casual way in which the recommendation to "take an antipyrine powder" is often made by irresponsible persons, cannot be too strongly condemned. He expresses a decided opinion that antipyrine ought to be scheduled as a poison, and dispensed only on a written order from a qualified medical practioner being produced.

A TEST FOR ALBUMEN IN THE URINE.—Dr. Alex. C. Ewing (*Med. Record*) proposes this test: Draw up into a small glass pipette, or tube, about an inch of the urine, let the finger remain tightly over the top, and insert the pipette into nitric acid, and draw up under the urine about the same quantity of acid, when, if even a trace of true albumen be present, there will appear a beautiful line of demarcation between the acid and urine. This test is as accurate as it is simple, and, besides, is decidedly economical, and far less trouble than all others.

THE LARGEST CATHETER ALWAYS.—Dr. Ferd. C. Valentine (*Med. Record*) lays down the following apparently paradoxical rule: "In retention from any cause, compare the meatus with your catheters. When you have determined upon the size which promises to pass make your first endeavors with two sizes larger.

"The greatest possible safety lies in always using the largest possible catheter."

BIBLIOGRAPHICAL.

THE THREE ETHICAL CODES. That of the American Medical Association; Its Constitution, By-Laws, Amendments, etc., that of the American Institute of Homœopathy and that of the National Eclectic Medical Society. Limp cloth, round corners, 55 pages, postpaid, 50 cents. The Illustrated Medical Journal Co., Publishers, Detroit, Mich.

By comparing the Code of the Homœopathic Society with that of the American Medical Association, it will be found that several sections of the former are similar to the latter's code. The Eclectic Code is worthy of mention for its brevity and its common sense. It reads as follows: "The common rules and maxims of morality which are enjoined in the Bible, and have been recognized by the wise and virtuous of all time and in every civilized country, are comprehensive enough in their scope and sufficiently dignified in form to meet all the contingencies and emergencies which, in a moral point of view, are likely to arise in the transaction of business and the interchange of thought and sentiment between man and man."

A TEXT BOOK OF BACTERIOLOGY. By George M. Sternberg, M.D., LL.D., Surgeon-General, U. S. Army. Illustrated by heilotypes and chromo-lithographic plates and 200 engravings. Wm. Wood & Co., 1896.

Dr. Sternberg is recognized as one of the leading bacteriologists in the world; certainly no one in the United States stands as high for originality of investigation and results accomplished.

Under four heads the author discusses in the concise and clear style for which his writings are celebrated, as many of the various forms of bacteria as are of interest to the physician.

Part I. Classification, morphology and bacteriological techology.

Part II. General biological characters.

Part III. Pathogenic bacteria, their modes of action, channels of infection and susceptibility and immunity.

Part IV. Saprophytes, including bacteria in the air, water, soil, the surface of the body and exposed mucous membranes, food, the stomach and intestines, cadavers and putrefying materials from various sources. A very timely work of great practical value.

HOW TO FEED CHILDREN. A Manual for Mothers, Nurses and Physicians. By Louise E. Hogan. Uniform with the "Practical Lessons in Nursing" series. J. B. Lippincott Co., Philadelphia. Over 200 pages; 12mo. Cloth, $1. Contents: Chapter I., Reasons Why Mothers Should Study Dietetics; II., Infant Feeding; III., Cereals, Bread, Crackers and Cake; IV., Broths and Soups; V., Meats, Eggs, Fish, Oysters, etc.; VI., Inorganic Salts, Vegetables, Fruits, etc.; VII., Laxative Foods; VIII., Nursery Desserts; IX., Summer Diet; X., Traveling Outfits and Precautions; XI., Fat in Food; XII., Diet for the Approach of Cool Weather; XIII., Nursery Dietaries and Menus; XIV., Diet in Illness; XV., Diet for School Children; XVI., Recipes.

This little book presents a comprehensive table of contents in reference to the selection, preparation and administration of food for infants and growing children.

"As the subject suggests, the book takes up the question of dietetics, practically as well as theoretically. *It is based upon accepted facts*, and it may be relied upon by those in charge of children as a safe and valuable guide during the critical period of feeding in a child's life.

"The language used is simple, free from technicalities, and can be readily understood by every one. The subject matter is presented in a manner that is sufficiently interesting to carry the reader along without weariness, from the beginning of the book to the end.

"This book has a two-fold purpose—it simplifies the work of the physician by specifically applying the general laws of dietetics, and at the same time it is written in such a manner as to explain to mothers much that has hitherto been left unexplained. Explanatory lists of the various classes of foods are given, menus for all ages, seasons and conditions are presented, and reasons and examples abound.

"Its chief strength lies in Mrs. Hogan's practical application of theory. No one has before applied dietetic laws to a nursery so a mother could understand. Books hitherto on the subject of infant and nursery feeding have not appealed to mothers, as they were not presented from a mother's standpoint. The author, after many years of practical experiments, understands what is incomprehensible to the average mother, and also the difficulties met with by every one under the best of circumstances in the care of children, and she helps overcome them."

The above statements from the announcement are borne out by a perusal of the volume. Personal acquaintance with the author enables us to commend this book in the strongest terms as the safest book of its kind for the physician to prescribe.

—New uses are constantly being found for the X-ray. Applied to germs, the false is instantly detected by the merest tyro from the genuine.

CORRESPONDENCE.

OUR BOSTON LETTER.

PRESCRIBING CHEMISTS.

To the Editors of the NEW YORK MEDICAL TIMES:

After the most faithful and painstaking labor of the medical profession, we have at last secured certain legal restrictions, known as Medical Registration Acts, for the protection of the profession.

We should not, however, rest from our labors in the direction of professional protection.

What with swarms of irregular doctors and charlatans, with drug stores upon every corner, with hospitals, dispensaries and homes organized for some purpose or other, the general practitioner's lot is not an easy one.

It is not an unusual thing to hear a druggist proceed to explain to his customer the why and wherefore the remedy prescribed would be desirable. Such experiences are undoubtedly a very strong incentive for physicians to prescribe their own medicines.

The counter prescribing of druggists has become an unmitigated nuisance. It robs us of our income; it tends to drag the profession down to the level of trade, and it pretends to furnish advice upon medical topics gratis.

The druggists assume to know how to prescribe for the various ills which the flesh is heir to, and they are constantly doing this. It is a wrong to the profession, and is also in point of fact a crime against the laws of the Commonwealth.

If the State demands that physicians shall be registered before they can practice medicine, it should also be required of druggists that, besides their registration as pharmacists, they shall be registered as physicians as well, or else discontinue the practice of medicine behind the counter. It is quite time that our medical societies should give a bold rebuke to our prescribing chemists. Unless something of this kind is attempted very shortly, reputable physicians will discontinue the use of prescriptions.

It is not the young physicians alone who suffer from this abuse, but the entire profession, young and old, distinguished and obscure. This evil is not confined to our own country; French medical journals have of late contained many interesting discussions on the subject. To quote from one of them (*Journal of Hygiene*, January, '96), the writer says: "That the medical profession ought to be a sacred trust, not a trade, there is no question; but let it be sacred as it may, still it must support him who practices it. In a word, we must live, and the pharmacist appropriates three-quarters of what should constitute the physician's practice.

"The druggist has the advantage in so many ways. In the first place, it is so easy to consult him. His store is just at the corner, you have only to open the door, and there he is always ready with his advice. If it happens that he is out the clerk is there, or certainly his assistant, or, as I have often seen, his wife is ready to wait on you.

"If you are suffering from colic, he gives you a good quieting potion; if it be constipation, a purgative, and if you cough, a good throat tablet.

"He *sells* the medicine, to be sure, but he *gives* the advice also.

"The medicines are of his own compounding, and cost him two sous, including bottle, label, paper, string and sealing wax; he sells them for thirty or forty sous, but you go away satisfied you have the remedy, and you have economized on the doctor.

"To consult a physician is much more of an undertaking; first you must make the resolution, then climb the stairs, ring, wait—he is out. 'Come again to-morrow at his office hours.'

"But at his consultation, there are ten persons there before you, an hour of waiting and suffering. Then you must pay 5 francs and have only a little slip of paper to show for it, which after all must be taken to the drug store. How much easier to have gone there in the first place!

"It is in the convenience of access where lies the greatest advantage of the druggist; if he were on the second or third floor it would make a vast difference.

"If an accident occurs in the street, a man is injured, or a woman faints, where are they carried? To the doctor? Never in the world, but to the nearest drug store. And remember that the druggist, in all the course of his study, which is a long one, has never received any instruction in practical medicine, nor in pathology, nor therapeutics, nor physiology, nor operations, nor obstetrics.

"This is the programme of his studies at the pharmacal college: Physics, chemistry, pharmacology, microscopy, botany, crystography, and they are about to add bacteriology. But all that does not teach him to reduce a dislocation, to set a fracture, or to heal pneumonia.

"But this is not the only injury which the druggist inflicts upon the physician, and after all, an intelligent, experienced druggist can render great services to his neighborhood. Many poor people receive useful advice from him free of charge.

"But, unfortunately, the pharmacist is quick to forget what he has learned at college, and by experience, perhaps in the hospital, while the commercial part of his business absorbs his interest.

"He is anxious to make his store pay large returns, and to help towards this end he gets up specialties of his own composition.

"Each one is infallible against such or such ailments—one for one trouble, another for something else, besides the veritable panacea which will cure everything. He advertises them generously in the newspapers; in fact these advertisements contribute largely to the support of the papers, and editors declare they could not get on without them.

"The reader, suffering from one complaint or another, is sure to find among these announcements an elixir or a syrup which applies exactly to his case.

"He purchases a bottle of the wonderful remedy, on the label of which are full directions for the dose. The prospectus declares that it will effect a cure, and he has procured all this through the columns of a newspaper. What need of consulting a physician?

"On the other hand, if a physician resorted to such means of making his livelihood, he would be immediately disqualified and excluded from medical societies."

CONCERNING CONSULTATIONS.

In our large cities the services of the consultant are frequently called upon when there is some chance of giving the patient the benefit of able advice at a time when it is most needed.

In our smaller cities and towns, however, there is little doubt that many lives are sacrificed because the attending physician fears lest the mere fact of asking for a consultation would suggest to the laity a lack of the necessary professional skill.

Then, too, in this hustling age, there is prevalent distrust of consultants in general. It may be a very selfish motive, or it may be a conscientious confession of professional incapacity on the part of the attending physician which makes him hesitate before calling a consultation. There is oftentimes the fear that the consultant may be the attending physician later on.

There are those who are inclined to judge the profession rather harshly, asserting that it is degenerating into a mere trade.

Per contra, almost any man must have among his professional acquaintances those who are truly honorable practitioners, and with such there can be no degrading strife.

We must expect to find in any professional calling that all classes are represented, and in every community we witness conspicuous examples of the success of the selfish.

We must confess that these trials are discouraging, oftentimes demoralizing. They make us feel the need of all the manliness we possess.

Such then is the diagnosis of the disorder; is there no practical remedy?

Our medical societies can become much more valuable institutions, if we will make use of them for practical purposes as well as for professional instruction.

We should devote some time to the everyday matters which concern the success and welfare of the medical professional life.

Much has been written concerning consultations, but very much more is to be accomplished before we can recognize any decided improvement.

To mitigate the troubles which we find associated with consultations we must employ frank and open discussion of these matters at the meetings of our medical societies.

When it is understood in any given community that to be found in possession of a case as attending physician, where one had been previously called in consultation, is a positive disgrace, then will consultations be more generally employed.

CONCERNING HAYTI.

Dr. Perpignand Lafontant, physician-in-chief of the military hospital at Jaumel, Hayti (*Journal of Hygiene*), has recently published an excellent work relating to the condition of things on the island of Hayti from a medical standpoint.

It is unfortunate that no complete vital statistics are kept in Hayti, for it would be of great assistance to him, as well as to others who are seeking to reduce the rate of mortality in proportion to the progress of civilization.

There are many avoidable ills there, and tuberculosis makes terrible ravages. Yellow fever is equally prevalent, although most of its victims are immigrants, the natives being less susceptible to it. Malaria appears in many forms and is only combatted by quinine.

The influenza has visited the island regularly for several years now, and has claimed many victims.

Although Hayti has, of all the Antilles, the mildest and most healthful climate, yet there is a great deal of marsh fever.

Some of the cities of the island are free from this evil, and the writer suggests that the fields and open country should be drained, cultivated and planted to prevent these fevers.

Draining is in many cases sufficient to make a country sanitary, but it is expensive, and would be impracticable in some portions of Hayti.

On the other hand, there is nothing to prevent the cultivation of the soil and the planting of trees such as eucalyptus and its varieties.

Alimentation there is almost the same as in France.

Adulteration of food is not unknown. The milk is watered, and butter and lard imported from America are adulterated.

There are many varieties of drink, but all are adulterated and cause serious illness. To remedy this, it is proposed to raise the duty on alcoholic drinks imported to the island. This would increase the revenue of the island, and tend to increase the consumption of native rum, which, taken in moderate quantity, is not injurious.

The writer complains of the absence of any measures taken to disinfect localities contaminated by epidemics.

June, 1896. W. Thornton Parker, M. D.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

BIOLOGICAL SOCIETY.

Preisdent, M. Charrin.

M. Boucheron: In the uræmic, the saliva secretes uric acid, detected by the vapor of nitric acid and ammonia in the dried saliva; excess of heat of the acid or ammonia prevents reaction. This excretion is interrupted as soon as a sapid body is put in contact with the tongue, and provokes the secretion of the digestive saliva. Here is an example of the alternation of the functions of excretion and secretion in the salivary glands, which may also be found in other glands of the digestive tube.

M. Mathias Duval analyzed the histological and embryological researches of Mme. Laville upon the closed follicles of the conjunctiva. They appear after birth in the dog on the posterior face of the membrana limitans, and are caused by a thickening of the epithelium of the conjunctiva.

M. Dufour described the course of endogenous fibers in the posterior cords of the medulla.

M. Père has investigated the bacillus coli of the nursling and of the adult. In the excrements of animals he observed that the bacilli, in the presence of a solution of glycose carbonate and the carbonate of lime, form lactic acid pure, while in the fæces of man the same bacillus makes the impure acid. In the nursling, the bacillus coli gives the same reaction as in animals, and produces the transformation of the pure acid. But under the influence of a change of regimen it gives the same reaction as in the adult.

ANTHROPOLOGICAL SOCIETY.

M. Zaborowski analyzed a work by M. Matignon upon infanticide in China. It is very much less frequent than is supposed. Still-born children are often thrown into the street, and they are those that are eaten by pigs, not the living. There is much exaggeration in all the histories.

M. Le Baron de Vsage presented a catalogue of the Russian Ethnographical Exposition, which he had organized at the Museum Guimet. There were numerous objects from a voyage made in Siberia to Tobolsk and Krasnviorsk.

M. Collignon read an interesting work upon Chinese eunuchs. The Imperial Palace employs a large number of them. Of the 7,000 beings it counts, there is but one virile man, the Emperor. Among other functions performed by the eunuchs, they are the guardians and priests of the women, and bring to the Emperor the one he desires, and keep a register of it. They are also actors, etc., and well paid. They resign themselves voluntarily to become eunuchs, and before the operation the operator asks the victim if he consents; upon his answer in the affirmative, he severs testicles and penis at one stroke. Three days are passed without urination, the meatus being kept unobstructed. Death by urinary infection is rare, three or four in 100. Grave consequences sometimes occur, as the 'meatus retracts, and produces incontinence of urine with the diffusion of an ammoniacal odor that can be perceived at a distance, and enables the Chinese to diagnose a eunuch. The eunuch carefully preserves his genital organs in alcohol. He calls them his precious objects, and has them interred with him, so that he may not appear mutilated before the Deity; if not, he might be transformed into a mule. There are inspectors of these precious objects, and the eunuch is held under a heavy penalty not to destroy his bottle of alcohol and contents. M. Capitan exhibited prehistoric instruments in stone. M. Letourneau presented a work upon the Chinese Commune. Communal autonomy is much more developed than in Europe. He also explained the Lybian inscriptions, and compared them with the Gallic dolmens. In both the cross, the rose and the circle, etc., are found. The Lybian alphabet differs much from the Punic, and approaches the dolmenic writing.

ACADEMY OF MEDICINE.

Treatment of Malignant Tumors by Natural and Immunized Serum.—MM. Arloing and Courmont have tried this treatment in many patients affected with sarcoma and epithelioma. The only result has been a diminution of the inflammatory zone surrounding the tumor, which, in some cases, facilitates surgical intervention. The natural serum gives the same results as the immunized, and in the end the latter may produce general symptoms of purpura and œdema.

Therapeutic Application of Gastric Juice.—M. Fremont de Vichy, by giving the gastric juice obtained by isolation of the stomach of the dog, has had good effects in gastric disorders, enteritis, infantile cholera, apepsia, hypochloridia, etc.

Hereditary Syphilis of the Medulla.—M. Fournier reported an important memoir of M. Gilles de la Tourette upon heredo-syphilis of the medulla during intra-uterine life, infancy and at a more advanced age. The lesions of intra-uterine origin produce death before delivery, or during the first months subsequently. Those of diffused embryonal meningo-myelitis resemble the diffused embryonal hepatitis described by Hudelo. Clinically the accidents seem to resemble congenital spasmodic tabes, or the disease of Little. M. Tourette reports three prominent facts from the point of view of the effects of heredo-syphilis in the pathogenesis of this affection. From two to eight years the types are more varied, the tissues become more differentiated, and the medulla, meninges and vessels are more profoundly involved. Besides the diffused lesions, perivascular gummata are observed, interstitial and meningeal, and clinically common paraplegia and the spasmodic type of Charcot-Erbe, ordinarily curable.

M. Raymond described a recent case of anterior poliomyelitis. From eighteen, twenty-two, thirty-nine, and even to fifty years, slow heredo-syphilis may be demonstrated clearly. Tabes in particular seem to depend upon a hereditary infection from antecedent syphilis, which should always be investigated.

Contractile and Hemorrhagic Myodermia.—M. Landouzy reported a work by M. H. De Brun, of Beyrouth, from which he derives the following conclusions: There exists a disease characterized by these phenomena: At first, high fever, malaise, vomiting, cephalalgia, rapid appearance of typhic symptoms with no nocturnal agitation, and often violent delirium. The thermic periods are three in number. First: A sudden ascent to 39 degrees, an oscillation for eight or ten days from 39 to 40 degrees. Second: Apyrexia during eight days, with occasional hypothermia. Third: Temperature again mounts to 39 degrees. General muscular contraction, especially marked in the muscles of mastication, of the face and nucha. There is a peculiar alteration of the skin, which becomes like soft wax, and at about the third period subcutaneous hemorrhages occur, in the form of multiple ecchymoses, surrounded by a white zone and painful. The absence of meteorism, of red spots, or of any eruption, is notable. The duration of the malady is from three to four weeks, prognosis grave, and the principle of infection is as yet unknown.

OPHTHALMOLOGICAL SOCIETY.

Report Upon the Ophthalmological Geography of Trachoma.—M. Chibret read a long and learned paper upon this subject; his conclusions are as follows:

First: Grain or microbe unknown, pathological cell.

No micro-organism, not even the coccidiæ, can be considered as pathognomonic of trachoma. There is an analogy between the evolution of conjunctival granulation and that of tubercle. The different forms of trachoma, superficial, granulation, hard, warty, granulation soft, imbedded in the conjunctival tissue, a mixed form intermediate between the two preceding forms, folliculitis, and catarrh, constitute the modifications of the conjunctiva reactional of trachomatous infection. The folliculitis and the catarrh may be provoked by other causes of conjunctival irritation, the granulation alone remaining constantly typical of trachoma.

Second: Locality, race, profession, alimentation, temperament. The idea of race dominates the etiology of trachoma, and the immunity conferred by race may be absolute, or relative, the receptivity varying with the race. The immunity is absolute in the savages of Canada—the Iroquois, Hurons, Mic-Macs, Chippewas, etc., who never contract trachoma. They are very easily and very gravely attacked by all other virulent maladies imported by Europeans; viz., tubercle, syphilis, eruptive fevers, etc. They are absolutely immune from trachoma despite the deplorable hygienic conditions, which generally increase its receptivity among other races resident in Canada. Certain negro races also enjoy a greater or lesser immunity from this disease. Among the white races, the Celt race, of Broca, has a relative immunity; that is to say, that a Celt is immune from the virus of trachoma that has been previously attenuated by passage through another Celt. This law is illustrated by the absence of the contagiousity of trachoma among Celtic populations. Other human races present a receptivity more or less great—Celts, Germans, Anglo-Saxons, Semites, Slavs. The yellow race shows an increasing receptivity, which varies from 1 per cent. and less to 7 per cent. in the Chinese provinces of the South of China—*Hirschberg*. Occupation does not seem to constitute conditions of immunity. Poor nutrition, bad hygienic conditions and want of cleanliness are favorable to its receptivity, the lymphatic temperament and paludism equally predispose to it.

Third: Meteorological conditions, atmospheric pressure, temperature, hygrometric variations, insolation. Altitudinous climates are as unfavorable to the extension of trachoma as to the diffusion of tuberculosis, and a marine climate has analogous qualities. Insolation and heat increase receptivity and diminish the immunizing effects of altitude and of a marine climate.

M. Abadie: It is the virulence of the virus that especially predominates over race and immunity. Contagion is only effective in thickly-settled populations.

M. Javal: Causes, which I shall call accessory, dust, for example, should be taken into account. In countries where they do not prevail there is no trachoma.

M. Galezowski: I do not believe in the great influence of race. In Persia the nomadic tribes have no trachoma, while the disease is frequent among Persians.

M. Truc, of Montpellier: In my opinion the grain germ must be the only cause, and contagion is a powerful auxiliary. M. De Sperille: In certain colonies where all races are mingled, there is no trachoma, but the contagion exists of other infectious maladies. M. Sulzer: In Switzerland, where all races are to be found, trachoma does not exist, but the Swiss may contract the malady by removal to other localities. Climatic conditions seem to me to exercise a preponderating influence, while racial influences are entirely secondary.

Comparative Value of the Iodine Treatment of Choroiditis.—M. Vigne, of Paris: I have had occasion during the last year to mark the satisfactory results I have derived from the administration of subcutaneous injections of iodine in affections of the choroid.

During that time I have submitted about two hundred patients to that treatment, and in some cases its action has been complete. My researches have proved: 1st. That the subcutaneous injections of iodine are much more efficacious than any other preparation in affections of the uveal tract that admit of iodine treatment. In certain subjects in whom the internal use of the iodurets was impotent, their curative action has been demonstrated. 2d. The affections of the uveal tract, with or without the participation of the sclerotic, that are happily influenced by the iodine treatment, are the plastic, and even fibrinous forms; that is to say, the disseminated choroiditis, the fibrinous-irido-choroiditis, and irido-sclero-choroiditis. It is of itself alone sufficient in the disseminated exudative choroiditis. It is well, in the two other forms, to unite the usual means, and particularly the revulsive cautery. 3d. It is especially in rheumatic choroditis that iodine injections are active, and they also influence favorably bacillar choroiditis. 4th. In the specific forms, they act no better than the iodurets, and are far inferior to mercury. 5th. Amelioration is announced by the diminution and subsequent disappearance of vitreous flocculi and finally by the increase of visual power. 6th. Medication is really efficacious at the period of exudation. 7th. The daily doses are from 0.01 to 0.04 centigrammes; phenomena of reaction insignificant. The injection is followed by slight pain, no abscess nor any other accident worthy of consideration.

Gummata of the Ciliary Circle.—M. A. Terson, of Paris. Gummata of the ciliary body have been considered by some authors as lesions of tardy growth, occurring many years after chancre. M. Terson reported ("Archives Generales de Medecine, 1894") a case in which ciliary gumma supervened in the first year of syphilis. Gumma of the ciliary body is a grave complication, which must not be confounded with iridian condyloma, so easily curable. It rapidly perforates the sclerotic, and often induces atrophy of the eye. M. Terson reported two new observations. In one the eye was preserved by an intensely active treatment by intra-muscular injections; in the second, the eye became atrophied. Accidents of "tertiarism," Fournier, have supervened in the two first years of syphilis, coexistently with gummata and periostites in young subjects, alcoholics and malingerers. They are due to the gravest forms of the evolution of syphilis and the nature of locality. From a therapeutic point of view, mercurial intramuscular injections are much more efficacious than frictions, and have given the best results in the worst conditions. All the tertiary syphilitic affections of the eye and the annexæ may equally occur, and often in the first years of syphilis, and before the slow period to which they have been assigned by authors.

Melanotic Sarcoma of the Eyelids.—To the nine or ten cases only that are known up to this time, Dr. Guibert adds a personal observation, with the complete histological analysis of this disease, by Lagrange, of Bordeaux. An interesting peculiarity signalized by the author at first is that this neoplasm was developed upon a burn of the face occurring in infancy. As respects the pigment contained in the tumor, it is not of hematic origin, as was proved by the reaction of chlorhydric and sulphuric acids and the reaction of Perls. The prognosis is perhaps less unfavorable because the pigment is contained only in the center of the tumor. The patient, six months after the operation, has had no return of the disease.

The Angel Gabriel Before the Society of Psychic Science.—While the venders of literature are announcing upon the thoroughfares the last predictions of the Prophetess of Paradise, the Society of Psychic Science is pursuing the inquiry instituted in the case of Mlle. Conédon. She has heard the report presented by Dr. Le Meant de Chesnay in the name of the Commission charged to examine evidences brought by persons who have consulted the prophetess, or been in association with her. These evidences have been divided into three series, viz., those which furnish no elements of proofs for or against the hypothesis of an exterior influence upon this subject; these are the useless evidences. The evidences unfavorable to her inspiration or the intervention of any supernatural power are numerous. It is not only easy to deceive the clairvoyant by putting insidious questions to her, but to sincere questions, and presented in good faith, she very frequently answers incorrectly and childishly. The favorable evidences are given by the mind reading, certified examples of which, from intelligent individuals, whose word merits confidence, are cited by the reporter. She has made revelation of the present of facts known only to persons who consulted her, or of other facts of which all were ignorant, but subsequently verified. The report concludes thus: "Despite all the distrust that we have of Mlle. Conédon, we recognize that the facts of clairvoyance attributed to the 'seer of Paradise' by numerous and trustworthy witnesses cannot, according to the present state of science, and without supernatural agencies, which seem impossible, be explained by any natural phenomena." Dr. Menant de Chesnays believes that in order to arrive at the knowledge of the nature of the phenomena of which he treats it would be necessary to study profoundly the source of human clairvoyance, and for which a new commission should be instituted.

Investigation of the Spores of the "Aspergillus Fumigatus" in the Nasal Mucus and Saliva of Healthy and Unhealthy Subjects.—M. Rénon reports that in fifty-eight cases he has succeeded only once in detecting the spores of aspergillus in the saliva, and six times in the nasal mucus. This fact serves as an explanation of the rarity of cases of aspergillosis of the nasal fossæ and of the pharynx, described by Schubert, Siebermann, Zarniko, MacKenzie and Dunn.

HOSPITAL FOR SICK CHILDREN.

Prophylaxis and Treatment of Bronchitis and Broncho-Pneumonia in Young Children.—Prophylactic treatment of bronchial infections should be practiced by nasal and buccal antisepsis in children attacked by measles, scarlatina, whooping cough, etc., and by such measures as are designed to diminish the chances of dangerous contagion. Isolation of the children should not be collective, but individual for this or that disease, and secondary infection should be avoided of certain patients, affected, for example, with simple rougeola without other complications. The treatment of simple bronchitis presents many therapeutic indications. 1st: To produce antisepsis of the bronchiæ by the use of different substances, viz., terpine and benzoate of soda internally, and externally creosote, essence of turpentine, of eucalyptus and tincture of benzoin. 2d. To facilitate expectoration, either by emesis with ipecac or the balsams, or diffusible stimulants, such as the acetate of ammonia. 3d. To appease the cough by narcotics and anti-spasmodics. The only ones suitable to a very young child are lauro-cerise water, aconite and belladonna. 4th. Counter-irritation by sinapism upon the chest, enveloping the chest in wet applications, or covering the limbs in lint bandages. The treatment of broncho-pneumonia should be as follows: Revulsion by sinapism, or, better still, wet applications to the chest. Diffusible stimulants, which are also expectorants; viz., ether, acetate of ammonia. In acute broncho-pneumonia employ injections of camphorated oil 1-10. The camphor acts as an expectorant, and sometimes as a diaphoretic. In cases of insomnia and agitation, give at night injection of chloral 0.20 to 0.40 c. g., and injection of caffeine, if there are indications of cardiac exhaustion. As respects chemical anti-thermics, M. Marfau reports no good effects; quinine internally by suppositories or subcutaneous injections may be administered.

Employment of Compresses, Collyria, Irrigations and Pomades in Ocular Diseases.—Dr. A. Trousseau: Compresses and irrigations: The object of the compress is to insure asepsis. To modify the conditions of inflammation and temperature, they should be employed singly, or conjointly with irrigation. The compress alone when there are no secretions from the eye or its annexæ, and combined with irrigation when there is muco-pus or pus; cold applications are suitable to conjunctival affections, the warm in palpebral and corneal diseases. If the compresses used are cold, dip two pads of cotton in the solution—borated water, 4 per cent.—and change them alternately every two or three minutes four or five times a day for a quarter of an hour each time. If warm, use as before, but with the solution more or less warm, keeping the eye covered meantime with gum taffeta. Collyria: These should be prepared in small quantity, and with boiling water to prevent their alteration. Employ mydriatics—atropine, duboisine, cocaine; myotics—eserine, pilocarpine; astringents—sulphate zinc, etc., caustics—nitrate of silver, etc. Pomades: These are employed either as collyria, replacing the liquid by vaseline, or as irritants—mercurial calomel, yellow oxide of mercury—or as topical applications, pomades salolated, borated and idoform. Apply with a suitable instrument, introducing into inferior cul-de-sac from above downwards.

Lavage of the Blood in Infectious Diseases.—M. Lejars: Washing the blood in the above diseases, proposed and experimented upon by MM. Dastre and Loye in 1889, for sometime past utilized in cholera, practiced by M. Hermann Sahle, of Berne, in typhoid fever and other diseases, has of late been successfully employed in a number of surgical infections. I am able to add many new facts to those which I published at the beginning of the year. Even in desperate cases intravenous injections always assure a slight amelioration, and give a renewal of life and of vital resistance, sometimes useful in surgical intervention. These clinical results are sufficiently numerous and satisfactory to authorize the following conclusions: 1st. The intravenous injection of artificial serum in massive doses is harmless in man. 2d. Even in desperate cases it always retards death and insures an interval that may be utilized. 3d. Provided the functions of the kidneys are properly performed, it gives unexpected success in infections, and deserves consideration as a general method. A grave infection threatening an abrupt termination may be stayed and attenuated by a copious injection. But it is necessary most frequently to renew the lavage vigorously for many days. In order to effect purification, properly called, it is useful to combine subcutaneous injections with the intravenous in small doses, repeated every hour or two. 4th: The method used matters little, but the intravenous insures the speediest result, and should be preferred in urgent cases. M. Charrin: By a strange abuse of language, saline solutions are designated under the denomination of serums. This is a confusion that is to be regretted, and that should be made to disappear. For example, it is said that from two to four litres of salt water, mineralized, are forced into the veins. Neither an animal nor a man could tolerate such a quantity of pure serum, for the reason that death would supervene before the operation was finished. M. Chauveau said the use, more and more extensive, for six or eight years, justifies the distinctions of these liquids. Serum is a fluid too clearly defined in physiology, and especially too toxic in truly scientific language, and despite the qualifications used, to designate it under the name of a simple mineralized aqueous solution. M. Lejars: The question of denomination is of no importance. I use only the name given by M. Hayem to the salt liquid called artificial serum. But I insist upun the good effects obtained by means of this liquid, upon condition always that the operator makes sure of the entire aseptic purity of the liquid he proposes to inject.

Influence of Chloroform Upon the Excretion of Urea.—M. Vidal: Maucas-Championnière has recorded the increase of urea in the urine of patients that have been operated upon, during the twenty-four hours after the operation. He attributes this phenomenon to operative shock, but it is also observed after the use of chloroform for simple explorations. I have experimentally, studied this result after chloroforming rabbits and dogs, and have seen the increase of urea begin a quarter of an hour after the beginning of the use of the chloroform and last several hours.

Relaxation of the Muscles in Organic Hemiplegia.—M. J. Babinski: I have observed in some cases of hemiplegia, or brachial monoplegia, due to a lesion of the brain, a relaxation of the muscles, which manifested itself by the possibility of executing certain passive movements in the paralyzed limb, more extensive than in the limb of the sound side. In the different cases of hysterical hemiplegia that I have seen, this phenomenon does not appear, and this fact may be a means of differential diagnosis.

MEDICAL SOCIETY OF THE HOSPITALS.

Elephantiasic Lupus of the Upper Limb.—M. Thibierge presented a patient upon whose left upper limb the following conditions were seen: A considerable tumefaction of the fore arm and back of the hand; œdema very great; various deformities of the fingers. On the little finger there was an absence of the first and second phalanx, the third was in contact with the head of the metacarpal bone and had a nail on it, the index was curved like a beak, nail also incurvated like a claw. There were papillomatous vegetations, bracelet-like, on the fore arm, and it was covered with patches and nodules of lupus; in fine, the arm was elephantiasic. This is a malady well-known, but very rare, and might be confounded with lepra, but there is no doubt of its being a tuberculous lesion. In this patient, the osseous lesion was the first to appear, afterwards the cutaneous, and finally came the tumefaction, preceded by erysipelas. Every month there has been an exacerbation followed by more swelling. M. Thibierge called attention to the osseous origin of this tuberculosis. It is frequeht, in the subjects of lupus, to find a profound lesion anteriorly, osseous or ganglionic, and extremely rare to meet it in primitive lupus. Moreover, M. Thibierge insists upon the existence of accidents of streptococcic origin. It has been said that lupus was cured by the effects of erysipelas, and cases of cure are cited. According to him, all these cases are disputable. Again, an indisputable proof of the small value of this theory is that scarcely any of the subjects of lupus had had erysipelas, and the patient presented by M. Thibierge is a case in point. It may be added that this patient has cutaneous tuberculosis on different parts of the body, the ears and thighs, but there is no trace of pulmonary tuberculosis.

Bilateral Stethography.—MM. Gilbert and Roger: We have given the name of bilateral stethography to a method of measuring the movements of the thorax, both in the normal condition and in cases affected with thoracic diseases, by which the slightest variation in the respiratory movements can be readily ascertained. Previous study of normal subjects has shown us that in half of the cases the thoracic expansion is more marked on one side than on the other, the difference, though slight, being more appreciable during deep inspiration and the convulsive movements, such as in cough or laughter.

During a great effort the respiration of the two sides is completely arrested, is afterwards resumed, deep and slow at first, but to return quickly to the normal type. If the subject contracts the muscles with slight energy, the respiratory pause is incomplete, but one observes a very curious difference between the two sides; the oppression diminishes and is even totally arrested on the side on which the effort was made, but it persists, though feebly, on the other. Our clinical researches have been made in seven cases affected with or cured of pleurisy, in four of which there was serous effusion, more or less abundant. Now to apply our method of bilateral stethography, which consists of a series of lines of demarcation, that serve as a means of registering separately the movements of each half of the thorax, and thus showing the least variation in the movements of respiration of each side: As is readily foreseen, the lines show during the periods of status a diminution of thoracic expansion of the affected side, more marked as the effusion is more abundant, but in all cases of recent pleurisy the modifications were still appreciable. In one case, we studied the change that demanded thoracentesis. It was a case of pleurisy on the left side, that had displaced the heart to such an extent that its pulsations encroached upon the line of the right heart. Ten minutes after the puncture, there was no amelioration, but at the end of half an hour the thoracic expansion became greater, and the heart assumed a median position. In another case in which the effusion was very great, the effect was slow, and required several punctures to produce the cardiac change. At the time of apparent cure, the affected side may resume the normal rhythm, otherwise the troubles continue, but too slight to be recognized by inspection. In a case of old pleurisy with thoracic contraction, there was simply an undulating line on the affected side, and the respiration was almost null. The lines are influenced, not only by the abundance, but by the nature of the effusion. In a patient with slight pleurisy the affected side was completely immovable. In this case there was hemorrhagic pleurisy, united with a pleuro-pulmonary cancer. Similar differences, but even more marked, are observed in cases of pneumo-thorax, which, although sufficiently manifest during calm respiration, are greatly exaggerated during forced respiration and cough. Results show the value that bilateral stethography may have. Like sphygmography, it only serves to verify and certify the usual methods of investigation. J. A. C.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Cycling Versus Morphine.—"In Chicago, that city of hurrying men and restless women," says the *British Medical Journal*, "there were, so a popular preacher said not long ago, no fewer than 35,000 persons who actually took hypodermic injections of morphine to save themselves from the pains and terrors of neuralgia, insomnia, nervousness, etc. Cycling has become the rage in Chicago as elsewhere, and the morphine-takers have discovered that a long spin in the fresh air on a cycle induces sweet sleep better than their favorite drug. The result is said to be that the number of those in Chicago who take hypodermic injections of morphine is diminishing. Exercise is the cure for half the ills flesh—and especially nervous, overwrought, city-bred flesh—is heir to."

Lobelia in the Treatment of Infantile Colic.—Dr. Holton, in the *California Medical Journal*, says: "On subsequent visits upon obstetrical cases, doctors are often requested to prescribe for the relief of what the nurse calls colic.

After ascertaining that the cause of distress is not mechanical, such as pins, chaffing of clothing, etc., I put one drop of lobelia tincture in an ounce of water and give one-half teaspoonful, warm, to the infant. The little one will usually fall asleep in five minutes. Any return of the trouble will yield to one or two doses. I have used this for many years and never knew it to fail in any case where those conditions were present."

Thyroid Extract in Surgery.—J. W. White (*Univ. Med. Mag.*, August, 1895) reports the following case: In March, 1894, a young girl who was dressing in front of a mirror in a private carriage attached to a train was thrown violently forward, her face striking the mirror, which was broken into many pieces. A large crescentic wound of the soft parts of the right cheek was inflicted. The wound was quickly cleansed and the edges brought carefully into position with interrupted sutures. Rapid union, entirely by first intention, followed, and the scar appeared satisfactory. In the following October it had become greatly hypertrophied and caused great disfigurement. Absorbent ointments, pressure by means of plaster, and other means of local treatment having been tried to no purpose, she was (in January, 1895,) put upon thyroid extract, from two to four tablets of "a well-known preparation," each tablet containing five grains, being given daily. All local treatment was discontinued, the scar being only covered with a film of collodion to prevent abrasion or irritation and to keep up gentle pressure. On several occasions marked elevation of temperature and quickening of pulse occurred, once to an alarming extent; but in a few weeks a perceptible change was noted, and at the end of about six weeks the scar had in almost its entire extent come down to the level of the surrounding skin and the dense base had disappeared. White does not claim that this was a case of true keloid, but he points out that the clinical distinction between keloid growths and hypertrophied cicatrices is, after all, based on the size of the growth and on its course rather than upon any more definite differences. He reports the case for the sake of the suggestion to which it leads up of the trial of thyroid extract in other conditions involving the skin, intractable to operative surgery, and either on the border line of malignancy, like keloid, or definitely malignant.

Curare as an Antidote to Strychnine.—At a meeting of the Sociétie de Biologie, M. Bourquelot read a note from M. Sardoreanu, who reported a remarkable cure of strychnine poisoning by the curare treatment. A woman having absorbed 60 centigrams of strychnine, was immediately given an injection of 25 centigrams of a 5 per cent. solution of curare. After eight hours a second injection of 10 centigrams was given, and the following day a further dose of 2 centigrams. By the sixth day the patient had entirely recovered.

Iodvasogen.—Lustikow (*Monatsheft F. P. Dermat.*) applied the iodvasogen (vasogen is vaseline impregnated with oxygen) in fifteen cases of gonorrhœal epididymitis, in glandular swellings, in five cases of syphilitic angina, in two cases of syphilitic ulcers of the leg, in one case of periostitis of the nasal bone, and in one case of scrofuloderma. The remedy proved an excellent substitute for tincture of iodine and has several preferences. The skin was never inflamed; the influence on the deeper-seated tissues was very marked; the preparation evaporates rapidly, to which the speedy disappearance of the iodine discoloration gives testimony. It is recommended in both the acute and chronic stage of gonorrhœal epididymitis, in beginning inflammations of the inguinal glands following chancroids, in all glandular swellings, and in syphilitic and tubercular affections of the skin and mucous membranes.

Hot Salt Water Enemata as a Stimulant.—Dr. O. Edward Janney writes to the *Hahnemannian* that Dr. C. E. Walton recently read a paper in which was related a case of collapse so intense that no response came from injection of whiskey, the use of strychnia, or the employment of other means of stimulation. Life was restored, however, by injecting hot salt water into the thigh.

In the discussion which followed the expedient was indorsed by Drs. Boothby, Green and McClellan, the latter claiming excellent results from injections of salt water (1 drachm to the quart), of a temperature of 100° to 115°, into the lower bowel.

Shortly after returning from Newport, Dr. Janney was called to a case of endocarditis resulting from rheumatism, in a boy of eleven years. Heart failure was evidently impending. The entire body was cold and clammy; the hair wet with perspiration; no pulse to be felt at the wrist or along the arm; the carotids fluttering; the eyes half closed; respiration labored.

Active efforts to bring about reaction were made and continued without avail, and death seemed at hand. In this extremity the rectal method of stimulation suggested itself, and was promptly carried out, a pint of hot salt water being injected and held within the bowel by means of external pressure. Improvement set in almost at once, warmth began to return, and the patient emerged from a state of collapse the most profound into a condition hopeful of ultimate recovery.

It may be that further clinical experience will demonstrate that we possess in enemata of hot salt water a convenient means of stimulation superior to anything else yet employed.

Sugar in the Dressing of Furuncles and Carbuncles.—According to T. Richardson (*Sem. Med.*), sugar—which is so frequently employed as a household remedy in the dressing of wounds—has the singular effect of accelerating the softening of furuncles and anthrax. The best method, he states, is to freely powder with it flaxseed poultices, which should be applied hot upon the region affected. Since Dr. R. has adopted this mode of treatment, he has rarely been obliged to have recourse to crucial incision, even in cases of carbuncle.

Freezing to Arrest Hemorrhage.—Dr. Hind reports in the *Lancet* the case of a girl twenty years old, who experienced continuous hemorrhage for ten hours after a tooth extraction. Pressure and plugging with perchloride of iron produced no results. He then tried freezing with ethyl chloride spray, after clearing out the clots, and was able to stop the bleeding immediately. To prevent recurrence he plugged the socket with wool soaked in tincture of hamamelis.

The New Astringent.—Tannic acid has long been a favorite astringent both for external and internal applications. Although of established value in certain intestinal disorders of the intestinal canal attended with diarrhœa, its use not infrequently proves disappointing, especially in affections of the lower bowel, owing to the fact that the drug is absorbed by the mucous membranes before that part of the intestine is reached. It has, therefore, been the aim of chemists to prepare tannic acid in such a form that it will exert its effect upon the entire length of the intestinal canal. The outcome of these experiments is tannigen concerning which Dr. John V. Shoemaker writes as follows in his text-book on Materia Medica and Therapeutics: "This is a derivative of tannic acid in which two acetyl and three hydroxyl groups are present. Tannigen was prepared by Meyer in order that it might pass through the stomach unchanged and exert the influence of tannic acid upon the intestine. Tannigen is a yellowish gray powder soluble in water and alkaline solutions. The substance is devoid of taste, does not disturb the appetite or digestion, and may be given for a considerable period without producing tolerance or habit. It has been generally given internally in doses of 3 to 8 grains thrice daily, but from 40 to 60 grains can be taken without bad results. Tannigen proved useful in diarrhœa, more particularly in chronic cases. Its effect was less decided in acute diarrhœa or that of tubercular origin. Tannigen has been employed also in chronic inflammation of the nose and throat.

The Action of Lactophenin.—(*Wiener Med. Presse*, 1896, No. 50.) Senfft reports a large experience with this drug in the treatment of children. He has used it as an antipyretic in pneumonia, bronchitis, typhoid fever and diphtheria. It reduces the temperature promptly, and he reports no untoward effect on the stomach or depressing effect on the heart. Because of the last named advantage he has substituted it largely for other antipyretics for children. To infants of one year he gives three-fourths of a grain; at four years he gives one-fifth of the adult dose. —*Archives of Pediatrics, June, 1896.*

Cold Air for Consumptives.—There are now six sanitariums in Germany at which consumptives are treated by constant exposure to air at a low temperature. Currents of cold air are allowed to pass through the bedroom at night, and during the day as much of the time is spent in the open air as possible. The pure cold air quiets cough, lessens temperature, arrests night sweats, improves appetite, and modifies or arrests the course of the disease. Observations made in these sanitariums have developed the interesting fact that it is exceedingly rare indeed that infection of healthy persons by contact with consumptive inmates is observed.

RETROSPECTIVE DIETETICS.

The Dietetic Influence of Chloride of Sodium.—The editor of *Modern Medicine* is of opinion that the excessive use of salt is a most common dietetic error, although but seldom alluded to by writers upon dietetics. The observations of many travelers, he says, as well as many facts of common experience, contradict the conclusions of Boussingault regarding the necessity for the addition of this ingredient to the food of human beings. The practice should be viewed as chiefly a matter of habit, Nature having probably exhibited the same wisdom in regard to the amount of chloride of sodium placed in our food as with reference to the other salts required by the system.

Experiments by European investigators some years ago also go to show that the use of chloride of sodium as a condiment is injurious to digestion in two ways:

First: It diminishes the amount of hydrochloric acid present in the gastric juice by provoking the secretion of a large quantity of neutralizing alkaline mucus.

Second: It diminishes the disinfecting power of the hydrochloric acid which is unneutralized.

In view of these observations, it must be clearly evident that the amount of chloride of sodium used should be reduced to a minimum. The presence of so much of it as exists in the urine and the perspiration is evidence that it is not utilized in the same way as organic food substances; in other words, it is neither changed nor retained in the body, but is rather discharged from it, and it is easily conceived that additional injury may arise from the excessive eliminative work required of the kidneys in consequence of its excessive use. For many years the writer has found it wise to urge upon patients suffering from indigestion the importance of lessening the quantity of salt taken with their daily food.

It is estimated that we daily consume about 140 grains of salt, which Dr. C. W. Woodward concludes (*Eclectic Med. Journal*) is entirely too much. Persons who have eaten from one to three drachms of salt daily for years are affected by several of the following symptoms:

1. A thickening and partial paralysis of the vocal cords, and an almost continual sore throat.
2. A pale and waxy color. A dryness of the cuticle, which perspires too freely upon exertion.
3. Constipation.
4. Chronic diarrhœa.
5. Abnormal appetite.
6. Retarded endosmosis and exosmosis.
7. Plethora and corpulency.
8. Thins the blood, causes slow circulation, and lowers the temperature.
9. Increases catarrh and prevents its cure.
10. Causes dandruff of the scalp.
11. Causes skin diseases.
12. Causes deposits and abscesses.

A number of cases are given with one or more of the above symptoms predominant. In all the salt was restricted and depurating medicines given with good results.

In catarrhal diseases, the use of salt aggravated the symptoms; removing it effected a cure. The reason given is that the skin not acting, from the effect of the salt, the mucous membrane had to perform an extra function, hence the discomfort. It is stated that acrobats eschew salt; that the Parisians, twenty years ago, deprived inebriates of salt. In six months all taste for liquor was gone.

Diet in Ulcer of the Stomach.—The dietetic treatment of ulcer of the stomach, says *Gaillard's Medical Journal*, is of the greatest importance. Few diseases, in fact, show the results of properly regulated diet more decidedly. A diet should be chosen which is bland and unirritating, which does not excite the acid secretions of the stomach, which remains but a short time in the stomach, which does not tend to cause extension and peristaltic action, and which does not tend to undergo rapid fermentation. At the outset of treatment, it is usually wise to employ rectal feeding for a few days. Food in small quantities may then be administered by the stomach.

The best diet in most cases is unquestionably milk. Its value has been proved beyond doubt. If the patient will tolerate it the milk should be thoroughly peptonized. It should be administered at frequent intervals, and in not too large quantities. Four ounces every two hours are usually sufficient. If the milk is not tolerated or does not agree, whey may be administered for a time, but it should be remembered that it contains but little nutritive material. Buttermilk may sometimes be substituted for milk, but the acid in some cases causes too much irritation. Milk diet should not be abandoned until it has been thoroughly tested, and every preparation given adequate trial. If a milk diet is impossible, scraped raw meat should be tried. This may be given alone, lightly seasoned, or it may be given in broth. Expressed beef juice is an admirable article of diet in such cases, and sometimes proves of the utmost value.

Weak tea and coffee may be given in small amounts, but alcohol is contra-indicated. If hemorrhage occurs, the stomach should receive complete rest for several days, and nutrition should be maintained by means of nutritive enemata. A rigidly restricted diet should be persisted in for at least a week after all symptoms have disappeared, and the return to an ordinary diet should be made slowly and with great caution.

Onions as a Nervine.—Onions are almost the best nervine known. No medicine is so useful in cases of nervous prostration, and there is nothing else that will so quickly relieve and tone up a worn-out system. Onions are useful in all cases of coughs, colds and influenza; in consumption, insomnia, hydrophobia, scurvy, gravel, kidney and liver complaints. Eaten every other day they soon have a clearing and whitening effect upon the complexion.

Cream in Congenital Constipation.—A Brooklyn physician states in the *Medical World* that the main dietetic cause of infantile costiveness is a deficiency of fat in the food. A large percentage can be successfully met by increasing the fat ingested. It has been his practice in the past two years to give the child from ½ to 1 tablespoonful of cream before feeding. The child may refuse to take it readily, but by sweetening the cream with loaf sugar, the child soon becomes fond of it and will accept all that is offered. Upon following this plan your cases of congenital constipation will suddenly diminish, and the child in the very depth of its soul will feel comfort.

William C. Ussery, M.D., of St. Louis, says that the best food for those suffering from typhoid fever is the banana. In this disease, he explains, the lining membrane of the small intestines becomes intensely inflamed and engorged. Eventually it begins sloughing away in spots, leaving well-defined ulcers. At these places the intestinal walls become dangerously thin. A solid food, if taken into the stomach, is likely to produce perforation of the intestines, and dire results will follow. Therefore solid foods, or foods containing a large amount of innutritious substances, as compared with nutritious substances, are dangerous and are to be avoided. The banana, although it may be classed as a solid food, containing as it does 95 per cent. nutrition, does not possess sufficient waste to irritate these sore spots. Nearly the whole amount taken into the stomach is absorbed, and gives the patient more strength than can be obtained from other food.

MISCELLANY.

—Alcohol has been found to be an efficient antidote to carbolic acid.

—The deaths from alcoholism in Stockholm amount to 30 per 1,000, the highest rate in the world.

—From fifty to sixty thousand deaths are recorded in England each year from pulmonary tuberculosis.

—Patent Alcohol. The Patent Office has on record 11,037 different patents for the manufacture of alcohol.

—Mme. Andriffed has directed the income of $160,000 be paid yearly to the man who discovers a specific remedy for consumption.

—The late Mrs. Anna A. Aspinwall, of Pittsburg, has bequeathed $3,000,000 to the hospital of the Protestant Episcopal Church, Philadelphia.

—A Baltimore preacher was paralyzed the other day while preaching. Had it been Col. Ingersoll while lecturing! exclaims the *Mexican Herald.*

—Nicotine soap, containing 0.7 to 0.9 per cent. of nicotine, is recommended as a specific in scabies. It is used in the general hospital in Bremen against all parasitic diseases.

—Hot Springs, Ark., is claimed to be the healthiest city in the world. The statistics of six consecutive years give a death rate of 10.79 per 1,000, or 7.54 for the permanent residents alone.

—Albumen: Egg albumen—white of egg. Albumin: A nitrogenous proximate principle, always containing sulphur; liquid, but coagulating at about 140° F., and in the presence of mineral acids, etc.

—It is reported that Dr. Dice, the medical attendant of the Nawab Fakir-el-Mulk has been promised a fortune of 2,000,000 rupees upon his patient's death. If this be true, the prince is probably tired of living.

—Dr. Pize, of Montelinar, France, has found that by injecting guaiacol under the skin in small doses operations can be performed without pain. The Academy of Medicine has congratulated him upon the discovery.

—Prof. Hunicke, of Washington University, St. Louis, is about applying for a patent by which, he claims, $10,000 of gold can be obtained from sea water at a cost of $1, every ton of water yielding from 2 to 4 cents' worth of gold.

—By a recent edict of the Emperor of China, Dr. Boudinot C. Atterbury, of Pekin, has received the decoration of the double dragon for his services to the wounded during the late war with Japan. Dr. Atterbury is the first American physician to be thus honored.

—The first newspaper printed in the Chinese language and edited and published by Chinamen has just been established in Pekin, under the patronage of some of the most powerful princes of the court. It is called the *Wan-Kuo-Kung-Pao*, or *Universal Intelligencer.*

—The College of Physicians, of Philadelphia, offers annually a prize in memorial of William F. Jenks. The essays submitted must be on the subject of "The Etiology and Pathology of Diseases of the Endometrium, Including the Septic Inflammations of the Puerperium."

—The French Academy of Medicine has decided to divide the 250,000 franc prize, founded by M. and Mme. Victor St. Paul as a reward to whomsoever should first discover a serious remedy for diphtheria, between Dr. Roux, of the Pasteur Laboratory, and Dr. Beleving, of Berlin.

—Prof. Baumann, of Freiburg, claims that the good results obtained from the use of the thyroid extract in goitre are due to the iodine contained in this gland. He thinks the disease results from a deficiency of iodine in the system, and that the drug alone is fully as curative as the animal extract.

—There is a new product of phenol and boracic acid, wherein the pungency of carbolic acid has been mitigated its odor disguised, and its efficiency greatly increased by the combination with boracic acid, which, although admittedly slower in action, is nevertheless unsurpassed as a true germicide.

—Water will not extinguish burning kerosene oil, says a writer in *The Household*, but dry sand will, and it is a wise precaution to keep a box of sand in some convenient place to be used in an emergency. If this is not at hand, the flame should be smothered by throwing some heavy rug or woolen substance over it.

—The third International Congress of Dermatology will be held in London, Aug. 4-8, 1896. The meetings will be of special interest, as papers will be read and discussed by some of the ablest specialists in the world. The Secretary for the United States is Dr. Geo. Thos. Jackson, 14 East Thirty-first street, New York.

—It has been discovered that an excellent quality of pure gutta-percha may be obtained from the dried leaves of the gutta-percha tree. The natives formerly cut down the trees to obtain the sap, but it is found that full as much gutta-percha can be obtained from two pluckings of the leaves of the same tree without injury.

—Sir B. W. Richardson, from a study of forty-three cases of angina pectoris (reported in the *Asclepiad*) concludes that this affection is a sympathetic neurosis, bearing much the same relation to the sympathetic nervous system as epilepsy does to the brain. Heart lesions and coronary disease are often absent, and when present are, he thinks, merely coincidental.

—The *Druggist* defines poison as any substance which if introduced into a living organism in small amount, or quantities beyond and over a certain definite limit, which latter is variable in each substance and for each class of organism, is capable of destroying life either by chemical or by its physiological action. Substances which do not kill are merely noxious or hurtful.

—A remarkable fact demonstrated by recent studies of cancer, is that the very conditions which diminish the prevalence of tuberculosis tend to increase carcinoma; that is, improved hygienic conditions decrease tuberculous conditions, but promote cancerous disease—thus giving the curious paradox that a high cancer mortality is an indication of good sanitary conditions.

—Nearly every form of infant food has been used in the New York Infant Asylum. The experience with them as foods—something for the infant to thrive upon and to gain weight on—was without exception unsatisfactory. Many varieties are positively dangerous. Cow's milk, cream and milk sugar, properly diluted, were demonstrated to be the only reliable substitute for mother's milk.

—The late Arséne Houssaye, French poet and journalist, enjoyed the distinction of wearing the military medal accorded to the soldiers of the Napoleonic wars, although he was not born until after the close of Napoleon's career, having received a lance wound *in utero* at the hands of a Cossack during the Russian invasion of 1815. Napoleon III. considered this sufficient to entitle him to wear the medal

—Says *Items of Interest*: "Nature itself has provided a tooth-wash that is better than any we can make; it is the saliva, which the system prepares for the very purpose of neutralizing acid and alkali that may be formed in excess. If pathological conditions injure this fluid, and prevent its normal action, we must, of course, assist it, but this is a rare necessity. Simply keep the teeth clean."

—Dr. Bayard Holmes, Professor of Surgery in the Chicago College of Physicians and Surgeons, assigns a remarkable reason for some doctors limiting their practice to gynæcology and proctology. He says they have such an overpowering fear of malpractice suits on account of their bad surgery that they confine their cutting to operations on the rectum and through the vagina, because these parts are not apt to be shown in court.

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ORIGINAL ARTICLES.

TALKS WITH YOUNG MEN ON THE SEXUAL FUNCTION.

By Walter F. Morgan, M. D., Leavenworth, Kan.

PART II.

I AM sometimes asked by young men what effect a varicocele has upon the sexual function. Aside from its mental and moral effect, as a rule, I think it has no marked influence. Young men and maidens are naturally very sensitive, especially so regarding the sexual organs. Reasoning *a priori* it seems improbable that a varicocele could exert a very marked influence upon the elaboration of the spermatic fluid. The clinical thermometer shows no increase of temperature on the affected side, as we might have inferred from the fact that in this disease we have simply an excess in the part of venous blood. Prof. Gross, in his able work upon surgery, states, amongst other indications for the radical operation in the treatment of varicocele: "When the patient's mind is so much affected as to render him unfit for active exertion." The dragging and neuralgic pains may also require the radical treatment. Any cause which determines an excess of blood to the part should be avoided; for example, constipation of the bowels, intemperance, sexual excess, and, in some cases, horseback exercise. As palliative treatment, we have applications of cold and hot water, and, above all, a good, firm and comfortable bandage, when properly applied, will often reduce the enlargement one-half in a continuous use of a year or more. The bandage should not be worn during sleeping hours. The bandages usually sold in the shops are not firm enough.

A little ingenuity and experience, with the right materials—shoemaker's webbing and cotton flannel and strong safety-pins—will enable the wearer to construct for himself a really serviceable and comfortable article. After retiring, if the first sleep is disturbed by erections, get out of bed, take hold of the bedstead or any convenient handhold, and go through a series of rapid alternate sittings upon the feet and risings to the erect posture (like the toy "jumping jack"), aiding the lower by the upper extremities, thus strengthening the muscles of back and limbs, while diverting the blood and nervous force from the sexual organs, and bringing sound and refreshing sleep. Regarding the effect of food and drink upon the sexual function much might be said; but the main point is for each person to study and know himself in this respect. We do not fight fire by heaping on it more fuel; we cannot conquer the fires of lust while our bodies lack vigorous exercise and are goaded on by stimulating food and drink. We often seem compelled in this life to choose the lesser of two evils. So it is with the various athletic games—football, baseball, boat-rowing, etc. While they are often carried to the excess which results in serious wounds and even in death, still they sometimes divert the superabundance of youthful vim from more dangerous and disastrous channels. Let us be moderate in all things.

As at our first meeting you requested quotations from some of the eminent authors who favor the general conclusions at which we seem to have arrived, I now invite your questions, which I will answer so far as I am able to do, and then proceed with the quotations:

First Hearer: Doctor, I inferred from remarks made at our first quiz that in one respect your views differ somewhat from those expressed in "Carpenter's Physiology" regarding abuse of the sexual organs; that facts obtained in a study of comparative physiology have led you to believe that masturbation is usually no more harmful than an illicit gratification of desire between the sexes, that, strictly speaking, you consider the one practice no more "unnatural" than the other, and that in general they equally abrogate the primary function of the sexual organs, viz., the procreation of the species.

Doctor: Yes, you have in the main correctly stated my views on this point. Some years ago, similar views to those I hold on this matter were expressed in the *New York Medical Record.* The motive in either case is not love, but lust, and the results are substantially the same. Lust gratified between the sexes requires for the act the demoralization of *two* individuals, whereas in the former case only one is directly injured, and this fact alone, without considering the infectious sexual diseases, may perhaps counterbalance any advantage which one practice may be supposed to possess over the other. Dr. Van Buren states that some of the most aggravated cases of spermatorrhœa were once to be seen among the sons of Southern slave holders, who were allowed free intercourse with negro women.

Doctor, what is the usual effect of coition when the woman is suffering from either the menstrual flow or from leucorrhœa?

Doctor: In my experience such instances are not common, but some of the most obdurate cases of urethritis simulating true gonorrhœa, which I have ever treated, were in men who had compelled their wives to co-habit while suffering under these disabilities. Even in prostitutes the voice of Nature cries out against intercourse under such circumstances; but the legal wives of brutal men are less fortunate, and are compelled to submit, to the injury of both themselves and their misguided husbands.

Fourth Hearer: Doctor, are there authentic instances of gonorrhœa arising from intercourse between healthy men and women?

Doctor: Ricord gives facetious directions for the infallible production of all the usual symptoms of acute gonorrhœa, as a consequence of such intercourse. Both the man and woman are recommended to prepare themselves by free eating and drinking, with plenty of dancing to heat the blood, and then, upon retiring to bed, the man must be extremely valiant in vigorously performing and frequently repeating the sexual act.

Second Hearer: Doctor, what is your opinion of the plan recommended by some authors for the prevention of conception by limiting sexual indulgence to a certain portion of the inter-menstrual period?

Doctor: In so far as it imposes a partial self-restraint, it is much better than none at all. However, besides being liable to fail in its immediate object, its remote effects cannot fail in being injurious, as it is merely an ameliorated form of sensuality. Moreover, it denies the act to the woman at the very time when by Nature she only or chiefly desires it.

Third Hearer: Doctor, do you think a man who can control himself perfectly for a fortnight, may continue to do so indefinitely, and that the longer he practices self-control the easier for him it will become?

Doctor: Experience gives a strongly affirmative answer to both of your questions. Now for our quotations, and in order that you may obtain a general notion of the physiology of our subject, we will read Dr. Wm. B. Carpenter, who states: "The essential peculiarity of the * * * spermatic fluid consists in the presence of a large number of very minute bodies, the spermatazoa, which from their usually remaining in active motion for some time after they have quitted the living organism, have been erroneously considered as proper animalcules. The human spermatazoon consists of a little oval flattened 'body' between the 1-600 and 1-800 of a line in length, from which proceeds a long filiform 'tail,' gradually tapering to the finest point, of 1-50, or, at most, 1-40 of a line in length. The whole is perfectly transparent, and nothing that can be termed 'structure' can be satisfactorily determined within it. Its movements are principally executed by the tail, which has a kind of vibratile, undulating motion; they may continue for many hours after the emission of the fluid, and they are not checked by the admixture with other secretions, such as the urine and the prostatic fluid. Thus, in cases of nocturnal emission, the spermatozoa may be found to live for many days. Their presence may be readily detected by an observer familiar with their appearance, and furnished with a microscope of sufficient power, even when they have long ceased to move, and are broken into fragments; and the physician and the medical jurist will frequently derive much assistance from an examination of this kind. Thus cases are of no uncommon occurrence, especially among those who have been too much addicted to sexual intercourse, in whom seminal emissions take place unconsciously and frequently and produce great general derangement of health, and the true nature of the complaint is obscure until the fact has been detected by ocular demonstration. Again, in charges of rape, in which evidence of actual emission is required by a microscopical examination of the stiffened spots left on the linen, we seldom fail of obtaining proof, if the act has been completed. In such cases, however, we must not expect to meet with more than fragments of spermatazoa; but these are so unlike everything else, that little doubt need be entertained regarding them. It has been proposed to employ the same test in judicial inquiries respecting doubtful cases of death by suspension, seminal emissions not being infrequent results of this kind of violence, but there are many obvious objections which would prevent much confidence being placed in it. * * * That the spermatozoa are the essential element of the spermatic fluid may be reasonably inferred from several considerations. There are some cases in which the *liquor seminis* is altogether absent, so that they constitute the sole element of the semen; whilst on the other hand they are never wanting in the semen of animals capable of procreation, but are absent or imperfectly developed in the semen of hybrids. Moreover, it may be considered as certain that the absolute contact of the spermatozoa with the ovum [of the female] is requisite for fecundation, whilst on the other hand, if the spermatozoa be carefully removed from the liquor seminis by filtration the latter is entirely destitute of fertilizing power. Hence the presence of the liquor seminis must be considered as merely incidental, and as answering some secondary purpose, either in the development or in the conveyance of the spermatozoa. * * * The power of procreation does not usually exist in the human male before the age of fourteen or sixteen years, and it may be considered probable that no spermatozoa are produced until that period, although a fluid is secreted by the testes. * * * The procreative power may last, if not abused, during a very prolonged period. Undoubted instances of virility at the age of more than one hundred years are on record, but in these cases the general bodily vigor was preserved in a remarkable degree. The ordinary rule seems to be that sexual power is not retained by the male to any considerable amount after the age of sixty to sixty-five years. To the use of the sexual organs for the continuance of his race, man is prompted by a powerful instinctive desire which he shares with the lower animals. This instinct, like other propensities, is excited by sensations, and these may either originate in the sexual organs themselves, or may be excited through the organs of special sense. Thus in man it is most powerfully aroused by impressions conveyed through the sight and touch; but in many other animals the auditory and olfactory organs convey impressions which have an equal power, and it is not improbable that in certain morbidly excited states of feeling, the same may be the case with ourselves. Localized sensations have also a very powerful effect in exciting sexual desire, as must have been within the experience of almost every one. The fact is most remarkable, however, in case of satyriasis, which disease is generally found to be connected with some obvious cause of irritation of the generative system, such as pruritus, active congestion, etc. * * * The instinct, when once aroused, (even though very obscurely felt) acts upon the mental faculties and moral feelings, and then becomes the source, although almost unconsciously so to the individual, of the tendency to form that kind of attachment toward one of the opposite sex which is known as *love*. This tendency cannot be regarded as a simple passion or emotion, since it is the result of the combined operations of reason, the imagination and the moral feelings, and it is in this engraftment (so to speak) of the psychical attachment upon the mere corporeal instinct, that a difference exists between the sexual relations of man and those of the lower animals. In proportion as the human being makes the temporary gratification of the sexual appetite the chief object, and overlooks the happiness arising from spiritual communion, which is not only purer but more permanent, and of which a renewal may be anticipated in another world, does he degrade himself to a level with the brutes. Yet how lamentably frequent is this degradation! * * * The high degree of nervous exitement which the act of coition involves, produces a subsequent depression to a corresponding amount; and the too frequent repetition of it is productive of consequences very injurious to the general health. * * * The secretion of the seminal fluid, like that of the other secretions, being very much under the control of the nervous system, will be increased by the continual direction of the mind towards objects which awaken the sexual propensity, and thus, if a frequent discharge be occasioned, whether by natural or unnatural excitement, a much larger quantity will altogether be produced, although the amount emitted at each period will be less, and its due perfection will not be attained, the fluid under such circumstances being found to contain an unduly large proportion of immature seminal cells. The formation of the secretion seems of itself to be a much greater tax upon the corporeal than might have been supposed *a priori*, and it is a well known fact that the highest degree of bodily vigor is inconsistent with more than a very moderate indulgence in sexual intercourse, whilst nothing is more certain to reduce the power of both body and mind than excess in this respect. These principles, which are of great importance in the regulation of health, are but expressions of the general law (which prevails equally in the vegetable and in the animal world) that the development of the individual and the reproduction of the species stand in an inverse ratio to each other. * * * The odoriferous secretion of the skin, which is much more powerful in some individuals than in others, is increased under the influence of certain mental emotions (as anger, fear or bashfulness) and commonly also by sexual desire. The sexual secretions themselves are strongly influenced by the condition of the mind. When it is frequently and strongly directed towards objects of passion, these secretions are increased in amount to a degree which may cause them to be a very serious drain on the powers of the system. On the other hand, the active employment of the mental and bodily powers on other objects has a tendency to render less active, or even to check altogether the processes by which they are elaborated. This is a simple physiological fact, but of high moral application. The author would say to those of his younger readers who urge the wants of Nature as an excuse for the illicit gratification of the sexual passion, try the effects of close mental application to some of those ennobling pursuits to which your profession introduces you, in combination with vigorous bodily exercise, before you assert that the appetite is unrestrainable, and act upon that assertion. * * * There seems to be something in the training of young men for the medical profession, which encourages in them a laxity of thought and expression on these matters that generally ends in a laxity of principle and of action. It might have been expected that those who are continually witnessing the melancholy consequences of a violation of the Divine law in this particular would be the last to break it themselves; but this, unfortunately, is far from being the case. The author regrets being obliged further to remark that some works which have issued from the medical press, contain much that is calculated to excite rather than to repress the tendency, and that the advice sometimes given by practitioners to their patients is immoral as well as unscientific. When Sophocles, having become somewhat advanced in years, was asked if he still enjoyed the pleasures of love, he replied: "May the gods preserve me! I have quitted them as willingly as I would have quitted a savage and cruel master."

Dr. William R. Gowers, a specialist of London, Eng., says: "Do we do all we can—and our profession gives us power that no other has—do we do all we can to promote that perfect chastity which alone can save from this [*i. e.*, infectious disease] and from that which is worse? The opinions that on pseudo-physiological grounds suggest or permit unchastity, are absolutely false. Trace them to their ultimate basis and they are groundless. They rest only on sensory illusions, and there are no liars like our own sensations. Rather, I should say they rest on misinterpretations always biased and often deliberate. With all the force that any knowlege I possess can give and with any authority I may have, I assert—as a result of long observation and consideration of facts of every kind—that no man was ever the slightest degree better for incontinence; that for it every man must be the worse morally, and that most are worse physically; and in no small number the result is, and ever will be, utter physical shipwreck on one of the many rocks, sharp, jagged-edged, or on one of the many banks of festering slime that are about his course, and which no care can possibly avoid. And I am further sure that no man was ever anything but the better for perfect continence. My warning is: Let us beware lest we give even a silent sanction to that against which, I am sure, on even the lowest grounds we can take, we should resolutely set our face and raise our voice."

The following is from R. W. Emerson: "The world globes itself in a drop of dew. The microscope cannot find the animalcule that is less perfect for being little. Eyes, ears, taste, smell, motion, resistance, appetite and organs of reproduction that take hold on eternity—all find room to consist in the small creature. So do we put our life into every act. The true doctrine of omnipresence is, that God reappears with all his parts in every moss and cobweb. The value of the universe contrives to throw itself into every point. If the good is there, so is the evil; if the affinity, so the repulsion; if the force, so the limitation. Thus is the universe alive. All things are moral. That soul which within us is a sentiment, outside of us is law. We feel its inspiration; out there in history we can see its fatal strength. It is in the world and the world was made by it. Justice is not postponed. A perfect equity adjusts its balance in all parts of life. Θὶ κύβοι Διὼς ἀεὶ εὐπίπτουσι—The dice of God are always loaded. * * * Every secret is told, every crime is punished, every virtue rewarded, every wrong redressed, in silence and certainty. What we call retribution is the universal necessity by which the whole appears wherever a part appears. * * * Every act rewards itself, or in other words, integrates itself in a two-fold manner; first, in the thing, or in real nature; and secondly, in the circumstance, or in apparent nature. Men call the circumstance the retribution. The causal retribution is in the thing, and is seen by the soul. The retribution in the circumstance is seen by the understanding; it is inseparable from the thing, but is often spread over a long time, and so does not become distinct until after many years. The specific stripes may follow late after the offence, but they follow because they accompany it. Crime and punishment grow out of one stem. Punishment is a fruit that unexpected ripens in the flower of pleasure which concealed it. Cause and effect, means and ends, seed and fruit, cannot be severed, for the effect already blooms in the cause, the end pre-exists in the means, the fruit in the seed. Whilst the world would be whole and refuses to be disparted, we seek to act partially, to sunder, to appropriate, for example—to gratify the senses, we sever the pleasure of the senses from the needs of character. The ingenuity of man has always been dedicated to the solution of one problem—how to detach the sensual sweet, the sensual strong, the sensual bright, etc., from the moral sweet, the moral deep, the moral fair; that is, again, to contrive to cut clean off this upper surface so thin as to leave it bottomless; to get a *one* end without *another* end. The soul says, eat; the body would feast. The soul says the man and woman shall be one flesh and one soul; the body would join the flesh only. The soul says have dominion over all things to the end of Nature. The body would have power over things to its own ends.

"The soul strives amain to live and work through all things. It would be the only fact. All things shall be added unto it—power, pleasure, knowledge, beauty. The particular man aims to be somebody; to set up for himself; to truck and higgle for a private good and in particulars; to ride that he may ride; to dress that he may be dressed; to eat that he may eat; to govern that he may be seen. Men seek to be great: they would have offices, wealth, power and fame. They think to be great is to possess one side of Nature, —the sweet without the other side—the bitter. This dividing and detaching is steadily counteracted. Up to this day, it must be owned, no projector has had the smallest success. The parted water reunites behind the hand. Pleasure is taken out of the pleasant things, profit out of profitable things, power out of strong things, as soon as we seek to separate them from the whole. We can no more halve things and get the sensual good by itself than we can get an inside that shall have no outside, or a light without a shadow. Drive out Nature with a fork, she comes running back.

"Life invests itself with inevitable conditions which the unwise seek to dodge, which one and another brags that he does not know; that they do not touch him; but the brag is on his lips, the conditions are in his soul. If he escapes them in one part they attack him in another more vital part. If he escapes them in form and in appearance it is because he has resisted his life and fled from himself, and the retribution is so much death. So signal is the failure of all attempts to make this separation of the good from the lax that the experiment would not be tried, since to try is to be mad, but for the circumstance that when the disease began in the will of rebellion and separation, the intellect is at once infected, so that the man ceases to see God whole in each object, but is able to see the sensual allurement of an object and not see the sensual hurt; he sees the mermaid's head, but not the dragon's tail, and thinks he can cut off that which he would have from that which he would not have. 'How secret art thou who dwellest in the highest heavens in silence, O thou only great God, sprinkling with unwearied providence certain penal blindnesses upon such as have unbridled desires!'"[*]

In our next talk we will consider more especially the therapeutics of some of the sexual diseases.

A medical journal says that probably the oldest physician in active practice in America is Dr. C. F. H. Wilgohs, of Doylestown, O., who is still practising at the age of ninety-three. He has the appearance of a man of sixty, reads the newspapers without the aid of glasses, and eats three hearty meals each day. He is a habitual smoker, but never used tobacco until he was fifty years old. He attributes his longevity to heredity and to careful regularity in all his habits of life. He says that for 300 years the male members of his family who have died natural deaths all lived to be 100 or more. His grandfather cradled wheat two days in succession at the age of 106, and died from overheating himself.

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[*] St. Augustine's Confessions.

HEART STIMULANTS.*

IT is a great lesson, and one which I learnt very early in my medical career, that it is possible, with a very small amount of valvular integrity, to pass through a long life of labor and usefulness.

This, as you know, is owing to what is called compensatory hypertrophy. And almost all your practical skill in treating a disease of the heart rests upon practical skill in deciding not whether this valve or whether that valve is diseased, but whether the increased power of the heart has or has not kept pace with the increased work required of the heart.

And here I want to say a word in regard to this question of diagnosis. There are some who think that when the aortic valve is diseased you should never give heart tonics or heart stimulants; that digitalis is not indicated. Not so, gentlemen. The aortic valve is no different in its functions and its relations to drugs than the mitral valve. It so chances that the mitral disease is produced during youth and the aortic disease comes on slowly during age, and so in the one case the heart is more prone to be unable to adjust itself to the new conditions, and you get cardiac weakness.

It is not a question whether this valve be diseased or whether that valve be diseased, but it is a question of the relation between the work and power. But no diagnosis of valvular disease is of any use save one that aids you in the greater diagnosis—therapeutic. We want, then, always, in every case of heart disease, from the very beginning to guard against this failure of development of compensatory hypertrophy; but before taking up the subject of drugs and their uses in failing heart let me say a word to you in regard to failure of heart power. Where does the strain come, or where is the lack apparent? When the heart fails the blood fails to be in the aorta and its tributary vessels, and when the aorta fails and its tributaries are empty the veins are full, and consequently you may take it for a sign of failing heart that there is over-venous repletion of the skin, congestion of the lungs and liver and œdema of the extremities.

Now I want to call attention to this fact, that it is the liver among all organs, next to the lungs, at least, that feels the excess of blood in the venous system. It is the engorgement of the portal circulation that is present almost always in every case of heart disease. And it is largely for this reason that mercurials are of the value that they are in heart disease. The fiftieth of a grain, or the sixteenth, or even the hundredth of a grain, of corrosive sublimate, given with the tincture of the chloride of iron, will sometimes effect almost a revolution ; aiding your true heart tonics in the most remarkable manner ; aiding, so to speak, in the digestion and absorption of the medicine. Many a time digitalis and those drugs lie in the alimentary canal, and you wonder why it is you do not get the effect

Now, about certain other influences before I take up drug treatment of heart disease. And especially do I want to force upon your attention the necessity of rest. We fail to remember that. But you know there has grown up a wide school of therapeutists in Germany who teach that we are to cure heart disease by cardiac gymnastics, climbing mountains, etc. Gentlemen, the heart, you know, is an organ that never rests under any circumstances, and do you believe it is common-sense teaching that you can take an organ that has had no rest from the time it came into the world, and build it up by piling onto the load which Nature has put upon it? Not so. Did you ever notice the difference between what we call a fat American or Englishman and a fat German of the better class? The American or Englishman could walk eighteen hours through the snow climbing mountains. His paunch might be larger than necessary for anybody to carry, but his arms and legs are iron. But take the German, he is all fat and beer. It is not the extra work put upon the heart that cures, but it is the extra work put upon the muscles of the body that cures them. It is because his is not a true case of heart overburdened, except by medicines.

Another set of cases are cured in this way. These are the cases with a heart working irregularly and doing evil to all organs continually, because the blood is loaded with uric acid derivatives or uric acid-like compounds.

But you take the American with the bad heart and put him up the mountains, and you ought to put the lid on the coffin so he could carry it up and bury himself.

Leaving these means, which seem to me of great practical importance, I come now to the drugs we have to use in cases of failing heart. I have never seen any good result obtained from any cardiac drug whatever that could not be obtained from nitro-glycerine, strophanthus and digitalis ; and I never have any satisfaction whatever in the treatment of real, downright heart trouble with any other remedy than these three.

First, nitro-glycerine. Bear this in mind above all other things that nitro-glycerine lays itself aside from the two other cardiacs in the fact that it dilates the arterioles and lowers arterial pressure. More than that—nitro-glycerine is a substance which probably has a powerful momentary stimulant influence on the heart muscle. If, however, you overstep the dose line in the slightest degree, that stimulant action changes immediately into one of extreme depression. Kill the animal with nitro-glycerine and its heart is relaxed as a wet paper bag ; kill the animal with strophanthus or digitalis and its heart is spasmodically contracted.

Then, again, remember that nitro-glycerine, like prussic acid, acts only for a few minutes. Therefore, if you are going to use nitro-glycerine at all, use it in small doses, and at very short intervals. It is only useful as a momentary pick-me-up to the heart. It is only useful in the crisis of the attack, and especially if the attack takes on the

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*From an address by H. C. Wood, M. D., Professor of Therapeutics, University of Pennsylvania (*Cleveland Med. Gazette.*)

form of angina pectoris. How it acts I do not know. Very possibly it may be by relaxing spasm rather than by stimulating the heart.

Strophanthus is a muscle poison. It only acts upon the heart as it acts upon the other muscles, but it so happens that the heart muscle is very susceptible to its influence, more so than the voluntary muscles; and so we are able to get the maximum stimulant effect on the heart before we get it on the other muscles. It is a drug, therefore, that acts directly as a stimulant to the heart muscle, increasing the susceptibility and causing it to react more readily than normal. But there is no reason to think that, like digitalis, it acts further as a tonic. Then, again, the muscle of the arteries is acted upon by strophanthus, and so contracts the arteries. It increases arterial pressure, it empties the veins and fills the arteries by stimulating the heart. It differs, I may say, in its action from digitalis in being more distinctly diuretic ; it is much more prompt than digitalis, acting at once ; it is much less permanent than digitalis—all practical points.

And now I come to the drug to which I want especially to call your attention, viz., digitalis : for there are certain things about its action and its use which, it seems to me, are not thoroughly understood by many of the profession.

In the first place, digitalis in proper doses always elevates the arterial pressure. How ? It does it in the first place by contracting the arterioles. It narrows the blood paths, it lessens the amount of blood space to be filled. It does this in a two-fold way : By stimulating the vaso-motor center in the medulla, and by acting on the arterioles themselves. Take a terrapin, cut out its nervous system, leave its heart intact, or cut out its heart, then put your fluid under pressure into the arterial system and have it come out from the venous system. Add a little digitalis and it almost arrests the flow. It contracts the capillaries in a two-fold manner. But it acts upon the heart more powerfully. Every one knows the full, strong beat you get from the drug. How ? Especially do not forget that it stimulates the pneumogastric nerves as well as the heart muscle. It lengthens the interval between the beats. When the beat comes it is a great, mighty throb of blood that strikes your finger as a blow from the hammer of Thor himself. It is the stimulant action of digitalis. But I want you to understand digitalis is more than a stimulant in this case, it is very life to the heart. You take a heart which is beating 110 to 120 times a minute. The veins are everywhere empty, the aorta is empty. The diastole has not been long enough for the heart to expand and receive the blood. The heart is continually irritated by impulses coming up from every part of the body crying "give us more blood." Now, you give that heart digitalis; you quiet it. You take off its nervousness, you get the long disastole, you get the powerful systole; so there comes a great driving wave of blood through the arteries. Recall the coronary artery, when the little trickle of blood comes out. At the very time when the heart is being overworked and over worried it is starving. But you give digitalis, and when the great wave comes out in the aorta it swells it out, it fills the coronary artery, it goes into every part of the heart, it brings sustenance and food. The old effete material that has been clogging the heart is swept away by the powerful systolic influence. And so digitalis acts as a heart tonic.

Here I would call your attention to a point in physiology. The experiments of Gaskell proved that there are two distinct alternating periods in the heart life—a time of functional activity and structural downtear, and a time of functional rest and structural upbuilding. During diastole of the heart there is no functional activity—there is relaxation. During systole there is functional activity. During systole this functional activity is accompanied by destruction of tissue. During the interval of diastole, functional rest, every force in the heart is given to repairing the ravages of function, and there is restoration and upbuilding. Now, it is the pneumogastric nerve that occasions the inhibition or stopping of functional activity, in order that the structure of the heart, which has been worn, may be repaired. My own belief is that every portion of the human body has behind it this principle. The spinal cord has its inhibitory centers. Every nerve cell has above it a higher nerve cell than inhibits it. The pneumogastric grasps it firmly and says to it : "Let the workmen build up the ravages in the walls."

What is digitalis? Digitalis is the one drug we know of that has the distinct absolute power of stimulating to a point of intense activity the inhibitory nerve. Expose a frog's heart, give it digitalis, and you will see the strange fight for mastery between the irritated pneumogastric nerve and the irritated heart muscle. Sometimes the digitalis arrests the heart in diastole. It never does if you cut the pneumogastric nerve. In the body sometimes the pneumogastric nerve gains control over systole, and you get arrest in dilatation. Now don't you see how digitalis acts in this case ; not simply as a stimulant, but it acts by bringing food to the heart at the time of its starvation and overwork ? It acts also by squeezing or clearing out of the heart the effete matters which have been lying there. But especially does it stimulate the pneumogastric nerve, this inhibitory nerve, this trophic nerve, enabling it not only to quiet the heart in long diastoles, but to make over, upbuild the heart.

We have a case of heart disease every now and then in which a man labors, has had no rest and no treatment—seems to be in the last stages of heart disease—in whom a short course of digitalis brings not only immediate relief, but seems to lift the whole man up to a higher plane. It is because the digitalis has really helped the trophic nerve to use the food which has been given to the heart by the use of digitalis, to the up-building of the structure which was almost destroyed.

Here let me say a word in regard to the employment of this drug in acute endocarditis, acute heart disease. Early in the case digitalis is very rarely indicated. It is more apt to do harm than good. The heart is already in a state of irritation.

There are some cases of endocarditis—septic or malignant endocarditis—in which it does not make much difference what you give. But in ordinary rheumatic endocarditis digitalis does harm. The heart is not weak, but over-irritated. Usually tincture of aconite and similar drugs are what you want to try. But when the storm has gone by, and you have nothing but the work to do, then remember that the only salvation for the stricken child is the upbuilding of that heart into a great powerful organ that shall enable it to overcome the leak that has been left in the valve. There is no rag that we can stick or push into the broken space. There must be increase of power, and so, under these circumstances, so soon as the acute disease has passed it is absolutely important to begin the use of digitalis in small doses, continually given, with great watchfulness. Recollect here, as in other cases, that when you give digitalis you give a drug which has a permanent influence. The moment you get the slightest effect that moment you stop the drug, for you know that effect will probably last hours, perchance days.

Passing by the ordinary use of digitalis, let me call your attention to the use of it in large doses. And here I beg of you not to misunderstand me; I do not mean to say that the doses of digitalis I am going to speak of are to be used in the ordinary cases of heart disease. But there come times in the life of almost every case of heart disease when the heart fails to respond at all to the moderate dose of digitalis, and when the large dose of digitalis will have a most pronounced and beneficial effect upon it.

It happened two or three months ago that I was sent for by Dr. ——— to see a case in consultation. The man had one pleura two-thirds full of water. His pulse was, as far as you could count it, 160 to 170 a minute; it was a mere broken, confused jumble of pulse beats. The man had been sick eight weeks without conscious sleep, sitting up struggling for breath.

"Doctor," my colleague said, "I sent for you to back me up in tapping this pleura."

"I don't think that pleura ought to be tapped. I will back you up in it provided you tell the wife of the man that he is liable to die during the operation. Have you tried digitalis?" I said to the wife: "The doctor thinks your husband ought to be tapped, but I think there is a very good chance of his dying just on the spot."

His wife said, then better let him die without operative procedure.

"Now," I said, "Let me try digitalis. Give that man 40 drops of digitalis now (6 o'clock), give him 40 drops at 8 o'clock, 40 at 10 o'clock, and then hold off."

I went there the next morning. The old man had slept soundly the whole night. Had begun to pass water freely (had had nearly completed suppression) and his pulse wss down below 100, perfectly regular. The result was that the man came down to see me in my office not many weeks afterwards, and has been going about apparently in good health ever since; of course, with a broken, diseased heart.

There are cases in which you must keep these doses of digitalis up. Years ago, when I had worked out these thoughts to my satisfaction, I was sent for by an old German doctor to see a patient; in fact, to take charge of her while he went on his vacation. The lady was sitting up in bed or on a chair. This old German was a very plain-spoken man.

"Doctor," he said, "I want you to take charge of Sarah there. I have given her digitalis, 10 drops three times a day, but she doesn't improve." Then turning to the patient, he continued, "see here, Sarah, what the devil is the use of your sitting there for weeks? This fellow says he will either put you in the graveyard or get you downstairs. You had better be in the graveyard than sitting here, so you had better let him try."

She said: "Very well. I would a good deal rather be in the graveyard."

I gave her about two teaspoonfuls of tincture of digitalis a day. She was around in two or three weeks afterward.

Not long after that I had another case—a man from somewhere in the West. He had been taken acutely ill, or rather, chronic disease had blossomed out in full while he was attending to some business in the East. He had been under care for three or four weeks. I put him on enormous doses of digitalis, and the result was that in one or two weeks he was able to go home.

Now, gentlemen, I mention these cases to you not simply as examples of the result that can be obtained by large doses of digitalis, but to point out to you a further lesson,

The ending of the old gentleman has not come yet. But it so happened one day in the course of some months after the woman that I put upon digitalis had been going about attending to her household duties, that she went to market. Returning with a light basket in her hand, she fell dead over her own lintel. And the banker from the West went back to his office and gathered together the gold, but it so happened one day that, as he was reaching forward to put his clutch upon the yellow coin, he fell dead across his counter.

Some would say it was digitalis that killed them; but there can be no truth in it. It is not digitalis that arrests the heart. It is the effect of digitalis to quiet the nervous condition of the heart, to feed up the heart as far as may be, to keep it going as long as it can, until, at last, there comes a time when there is not one grain of power left in the heart. When the power had all gone out of it absolutely it suddenly laid down and died. When you venture to give these large doses of digitalis in the treatment of cases of heart failure, tell the patient, or at least the friends of the patient, that this thing will come. It is better to live months, and perhaps, a year or two, and drop dead in the harness.

I have never yet seen but one case hurt by the use of digitalis, and that was a case of absolutely mistaken diagnosis, where it was not heart failure, but was neurasthenia from gastric catarrh.

A few words in regard to the so-called cumulative action of digitalis. This action comes on at certain times: First place, when it fails to act upon the kidneys; second place, when it is already in the body. You have a case of dropsy; you tap; reduce the pressure. Instantly the blood vessels take up the serum; that serum is loaded with digitalis. Then you have digitalis poisoning. Remember, it is not the drug that is in the body, but the drug that is in the blood that affects the body. When you have tapped and taken up that blood into the veins you get digitalis action. A practical point always: When you expect to tap a man suffering from heart disease or from any form of dropsy in which you have been giving digitalis, cease your digitalis for a length of time before you tap him.

Years ago, I noted one class of cases that nearly drove me to the lunatic asylum. Cases of mitral valve insufficiency; cases in which the heart seemed to be in the last stages of weakness; cases where I said to myself, this man will be picked right up by digitalis, but when I gave the digitalis there came increased heart panic and a horror that instantly demanded the withdrawal of the drug. I was sure that I was right in my diagnosis that the heart was weak and failing. I was sure that I was right in my physiology that digitalis was a heart tonic and stimulant. But when I put the two things together they did not work. These cases rapidly went from bad to worse. At length I worked out the problem. They were all of them cases of mitral insufficiency, and they were really cases of excessively weakened auricle; an auricle that was toned down and thinned out until it was little more than the thickness of paper. Now, under the influence of digitalis, there came back a reflex wave through the valve, and that met the blood pouring in from the pulmonary veins. This thin, paper-like auricle could not stand the double pressure. It was auricular weakness that did it. It could not stand the strain of the blood pouring in and the blood pushing back through the insufficient mitral valve by strengthened systole. Whenever you get that condition, you get a case that nothing can be done for. It is death, and death very near at hand.

One of our professors taught that digitalis is a useful remedy in treatment of aneurism. Gentlemen, it is death to aneurism. The reason these surgeons do not kill the case of aneurism is because they do not use digitalis in large enough doses to have any effect. Now you can see why digitalis is the most dangerous in a case of aneurism. You give a certain amount of strychnine or a certain amount of belladonna and you get 20 per cent of increase of arterial pressure. Take belladonna, the heart under belladonna beats 110 or 120 times a minute and sends out a spoonful of blood. What does digitalis do? It puts up your arterial pressure 10 per cent. But it does more than this. It makes a long diastole. It makes a great wave of blood; not a little tiny thread but a great mass of blood rushing with full force down the arteries, coming into the chamber enlarged by atheromatous degeneration, stretching and tearing everything before it. It is the immense distension under the influence of digitalis which makes it dangerous in these cases of aneurism. This is not theory. I learned these lessons practically. Some years ago, before I had worked out all these things to my own thinking, I was sent for to see a man at the hospital. He had a pulse you could scarcely feel; temperature, four or five degrees below normal. Gave digitalis freely. The next day I went from my residence to the hospital. The man was sitting up enjoying himself, talking and laughing. I put my hand on his pulse, and I got the tremendous big strokes of digitalis. Suddenly the man sprang with a great cry up into the air, and there came a crimson flood from the mouth and nose, and he dropped back dead. That man had an aortic aneurism. We had ruptured it with our digitalis. At the autopsy, the aneurism was found torn right across, and, therefore, gentlemen, when you have an aneurism to deal with don't use digitalis.

Suppose you have a case of advanced pneumonia. How do these patients die? Shock, paralysis, exhaustion or arrest of power of the right heart. What is the reason? Because the right heart is heated almost to death by the fever. You give digitalis. It stimulates that right heart. It does not cure the pneumonia, but it keeps the right heart up to its work, and, by and by, you cure the pneumonia.

In failing, insufficient hearts the only drugs I have found to be of value are strychnine and digitalis. Digitalis should be given hypodermically. More than this, I have found in the lower animals that the lowered pressure under chloroform or ether is brought up almost instantly by digitalis injected into the veins. More than this, I have found that digitalis given before the anæsthetic has a remarkable power in steadying the heart.

Whenever you have reason, in any case, to especially fear cardiac depression from the use of the anæsthetic, precede the anæsthetic by your digitalis; and precede it long enough that the heart shall be under the influence of that digitalis when the anæsthetic is given.

And with digitalis always use strychnine. It affects the respiratory function probably more than it does the cardiac function, but it certainly has some power in backing up the action of digitalis on the heart.

And then there is another drug which is of equal value with strychnine, and which can be associated with strychnine, and that is cocaine. It acts upon the circulation about as strychnine. But if you have pushed the strychnine to the limit of safety, you can raise the pressure, without producing convulsion, by giving cocaine and strychnine together. You will find in all cases of pneumonia, especially the adynamic type, and in advanced pneumonia, where you want to sustain the repiration as well as the circulation, that this combination of strychnine and cocaine is of the utmost value.

Harvard University is to have a department of comparative pathology added to the medical school, a sum of $100,000 having been left for the endowment of the chair.

THERAPEUTICS OF MASSAGE AND MEDICO-GYMNASTICS.

By Otto Scherini, D. G.,

Masseur and Medico-Gymnast, of Stockholm, Sweden.

MUCH has been written on massage and medico-gymnastics, but in nearly every instance there seems to be a lack of practical therapeutics. This article is intended to give the medical profession a few practical points.

The word massage comes from the Greek verb "masso," I knead or handle, or from the Arabic "mass," to press slowly or lightly. The grips generally used in massage are: Massage-up, massage-spiral, kneading, rolling, stroking, slapping, percussion, beating, pressing, shaking, vibration.

Some of the movements of medico-gymnastics are: Bending, stretching, lifting, spreading, closing, rotation, circumduction.

Massage may be considered as a branch of medico-gymnastics. It is applied from the periphery towards the center; thus following the venous circulation.

It is by no means a new method or remedy. Old Chinese literature intimates that it was used 3000 years B. C. It is used now in different parts of the uncivilized world in a less scientific form, as rubbing, pinching, pounding, etc.

Massage is a natural way of subduing pain. For instance, you hurt yourself anywhere, and you are sure to take hold of or on the injured part, and will do so involuntarily.

Massage has its progression. When starting to treat a patient it ought to be lightly given in the beginning, and gradually increased after some treatments, as to strength and length of time. Generally a massage treatment ought not to last over half an hour. Sometimes it is considered better to make the treatment still shorter, but twice a day.

Vigorous massage makes the tissues harder, light massage makes them looser; lengthy massage makes parts smaller, and proper time massage makes them larger. The duration of the time of application must be regulated by the physical constitution of the individual, by sex, by age, and by surrounding circumstances, and depends upon the good judgment of the operator.

Massage, especially in connection with curative exercises, will relax a stiff joint and strengthen a weak one. The old Romans used to let slaves, too old for service, undergo some kind of massage treatment, to make them look healthier and stronger, in order to be able to sell them with more gain.

Massage and rubbing are used a great deal in training for athletic feats and sporting events. On convalescents massage is used with great success to make them gain flesh and strength more rapidly. Adipose tissue can be lessened, and, in short, massage is used with great advantage, and effects and produces various results.

In giving massage use as large a surface of the hands as possible. The patient is generally more accessible in a half reclining position, with muscles fully relaxed, and limbs partially flexed. The pressure should be put into the upward stroke, coming downward only slightly touching the skin. This gives the patient a soothing feeling. The right hand of the operator is used with better advantage on any right part of the patient, and the same rule holds good regarding the left. In case of tenderness of the skin it is proper to use a little vaseline, but one who cannot give massage is sure to always use vaseline or some other fatty substance, otherwise he will inflame or injure the skin. It is a good way to hide ignorance.

There are other names for certain styles of grips, viz.: Effleurage, petrisage, massage à friction and tapotement. These names are, however, out of date, and besides they are not practical.

Curative exercises act as an excellent support of massage, and will in many cases assist in effecting a more speedy cure. Passive movements will prepare the body for active ones.

Massage on the naked skin is not always necessary, and when given in combination with active movements, it is even very seldom done. In large massage institutes, where there may be as many as fifty or more persons treated at the same time, it would not be agreeable for all those persons to undress, and it could hardly be expected that each patient could be furnished with a separate room. The Gymnastic Central Institute in Stockholm, Sweden, has got the name of being the first and the leading medico-gymnastic institute now in existence. The majority of treatments are given without having the patients remove their clothing. In local troubles, however, it is preferable to apply the massage on the naked skin, the operator depending a great deal upon his feeling (touch). It would be impossible to feel or detect small exudations, etc. It is also difficult to use the proper pressure, when manipulating through the clothes.

Three properties should be well developed in an able masseur, viz.: Elasticity, perseverance, and bodily strength and health.

Light massage produces more or less irritation of the skin, contracting the smaller vessels, and thus increasing the speed of the venous circulation. Deep massage affects a diffusion of the exudations, promotes the growth of new granulations and prevents cellulitis, etc. Slapping, percussion and beating act chiefly on the nerves in producing a molecular change in the nerve substance. Massage over the colon will increase the peristaltic action, and several neuralgic troubles are greatly benefited by vibrating pressure on nerves.

It is a good thing to prescribe some active gymnastic exercises for the patient to go through with, after the treatments are discontinued.

Other names are frequently used for medico-gymnstics, viz.: Swedish movements, remedial gymnastics, curative exercises, etc. The name Swedish movement is misleading. In treating diseases the same schemes of movements cannot always be used, and, besides, all of the civilized nations have been, and are, inventing different medico-gymnastic movements. Nearly every case demands individual treatment. As an illustration, it may be mentioned that in the Gymnastic Central Institute, in Stockholm, a record is kept of all movements. Over 16,000 different movements were used from 1834 to 1885, and every few weeks cases come for treatment that call for movements which were never seen nor thought of before.

A normal blood circulation can be controlled by proper and timely movements and manipulations. The ability of the nerve centers to furnish motive power depends upon their receiving their supply of nutriment from the blood. The waste is carried off by the venous blood, and material for new formation is furnished by the arterial blood; therefore, if the circulation can be controlled, the muscle contraction and expansion accomplished, the nutrition and absorption can also be controlled. The blood circulation is greatly aided by the activity of the body, and nutrition and absorption are materially increased. Absorption being partly a result of a normal venous circulation, it must follow that if the speed is diminished the absorption is diminished, and congestion will be the result. When the absorption is restored to its normal activity, it is only a matter of a short period when the consequences of congestion will be fully removed. Restored circulation in congested veins promotes general circulation.

In circumduction of the feet, circulation is greatly increased, but actively done it would very soon cause exhaustion, which proves that an immense amount of nerve force is used up. If the operator scientifically twists the feet, not only the same but even better results are obtained without using up any nerve force.

The amount of chyle can be materially increased by manipulations which bring it in contact with the intestinal surface. The functions of the pancreas and liver will be aided by a normal blood circulation through them. All the functions of excretion will be promoted, pulmonary action increased, capillary circulation quickened, thus bringing the blood in closer connection with the pores, and thereby improving exhalation. Congestion of the kidneys can be prevented or removed. If the peristaltic motions are nearly or altogether exhausted, defecation can be produced, and by continuing the exhausted parts will soon become active.

An able physician's diagnosis reveals the kind of treatment which should be applied, and the effect of the treatment tells the experienced operator what combinations of movements and manipulations should be used.

Most people seem to have the idea that the medico-gymnastic treatment is only good to develop muscles, and muscles can certainly be developed, but that shows plainly that nutrition and absorption can be increased, and the muscles are used as tools in aiding the blood circulation in other parts. To sum up in few words the whole physiological action of massage, it may be said that its primary effects are upon the great nerve forces of the body, beginning peripherally and extending to the nerve centers, to the great ganglionic or sympathetic system, which is above all the vaso-motor or blood-compelling power, and it is in this way that massage applied externally sets in motion the various functional operations of nerves, blood-vessels—arterial and venous—capillary vessels, lymphatics and lacteals, indeed, every form of circulation in the body.

DISEASES OF THE INTELLECTUAL FACULTIES AND CERTAIN FORMS OF INSANITY, CAUSED BY CONGENITAL DEFORMITIES OF THE GENITO-URINARY ORGANS IN BOTH SEXES.

By J. A. Carmichael, M. D., New York.

It has long been a well-known fact among physio-pathologists that there are individuals of both sexes, neuropathic from birth, who are the subjects of congenital malformation or of some unnatural condition of the genital or urinary organs, which predisposes them to sudden or gradual attacks of a psychic character, or finally of a form of dementia that may be characterized as sympathetic in quality, and by reason of which, at the moment of seizure, and involuntarily, they may commit some act of folly, or a terrible crime, or end life by suicide. There is a most intimate relation between the genito-urinary organs and the great nervous centers. A lesion, be it ever so slight, of these organs, may provoke in certain neuropathic individuals a change of character or some psychic trouble, or even real insanity in all its forms. A gentle, kindly and courteous nature may become repellant, coarse, proud and intractable, and finally, melancholic, hypochondriacal and maniacal. It often happens that a congenital malformation or disease of the genital system—the womb, ovaries, clitoris, vagina, etc.—may make women brutal, hysterical, unmanageable or furious, and thus be the prominent cause of divorce. It has been demonstrated that these irregularities of the intellectual faculties may come from an imperfect development of the genital system of women, and especially of the clitoris and its adhesion by one or both of its extremities to the labia minora of the vulva. These adhesions and the accumulation of a whitish discharge—smegma—irritate the peripheric nerves of the vulva, the erection of the clitoris and its complete development are prevented, and then appear all the hysterical phenomena, the brutalities, and finally a change in the entire character of women. All of these untoward and distressing symptoms can easily be allayed and arrested by the breaking up of the adhesions and setting the clitoris free.

Genital malformations of the male sex may also produce intellectual irregularities. This is particularly the case with the cryptorchids or eunuchs or hypospadiacs, especially those of the scrotal or perineo-scrotal form. The epispadiacs with vesical extrophy, etc., and the occurrence of mental disturbance, usually takes place when puberty is reached, and for the first time there comes the comprehension of the physical deformity. Many of these cases terminate in a profound and permanent melancholy, or by a more or less imperfect development of the intellectual faculties. Not only the physical deformities, but other different affections of the genito-urinary system, may produce nervous or psychic troubles in individuals, of neuropathic origin. For example, the orchi-epididymetics of blennorhagic nature, traumatics, tumors or tuberculosis of the testicles, atrophy, ablation of one or both testicles, because in effect these secretory organs contribute much to maintain the equilibrium between the intellectual and corporeal faculties. The Romans, recognizing the importance of these organs, at the historical epoch of the dictator Scylla, punished severely those who undertook the removal of the testicles, because, they said when a man lost his testicles, his health as well as, his intellectual powers were disturbed, believing moreover that the physiological functional perfection of the testicles gave to man his perfect corporeal and psychic health, and fitted him to appear in the courts as a witness for those who were deprived of those organs, anorchids and eunuchs. The importance of the testicles is shown in those who are deprived of them congenitally—eunuchs—and, more rarely, those who have small testicles—microrchids. They are most generally of feeble constitution, thin, pale, cachectic, timid and fearful. Byzantine historiographers, wishing to demonstrate the imperfection of the intellectual faculties of eunuchs, characterized them as incapable of corporeal or moral power, inefficient in all generous enterprises, effeminate, and in addition, misanthropes, calumniators, sycophants, full of infamous and traitorous instincts ; they have betrayed their own nation, and provoked national disasters—for example, Eutropius and other eunuchs.

To comprehend more clearly the importance of these secreting organs, and their intimate relations with the central nervous system, the following may be mentioned. It may be said that Origene, an ecclesiastical father and most devoted and vigorous defender of orthodoxy, wishing to follow the precepts of "Holy Writ," which declared "If thine eye offend thee, pluck it out, and cast it from thee"—and understanding from that the violent passions of the genital organs, and the desire for lascivious pleasures, removed his testicles. Before their removal, as above stated, he was one of the most powerful and invincible defenders of the orthodox church, and had written many works in its defense and protection. After their removal, his writings and teachings were full of contradictions and heresies. The ancients too, recognizing the importance of the action of these organs upon the organism, and the tendency of their exciting powers for sensual enjoyments, caused the testicles of animals to be put among the number of aphrodisiacs.

It was perhaps through the inspiration of this knowledge of the ancients, and based upon the importance of the marvelous influences upon the organism in general, and the central nervous system particularly, of these secreting organs, and that to them is due the equilibrium between the corporeal and intellectual, that the celebrated Brown-Sequard invented his famous lymph. Again, the importance of the genital organs, or rather, the very intimate relation that exists between these organs and the encephalon, is readily seen in the parallel development of the two systems. For example, the microencephale or the microcephale, which are cryptorchids or anorchids, or completely deprived of testicles. The monorchids, or those in which there is marked testicular atrophy, and the hypospadiac are imbecile, because of the incomplete development of the brain ; slight psychic troubles, with maniacal phenomena—Dr. S. Chromatianos—have occurred after puncture of a hydrocele, accompanied with very marked testicular atrophy, and after a phenic injection into the sac ; this may have been provoked by a sudden contraction of the cremaster muscle. In another instance, after an operation for chronic hydrocele with atrophy of the testicle, the patient was suddenly seized with nervous agitation, impairment of the intellectual faculties, lasting for a week, with maniacal phenomena, involuntary laughter and weeping, all disappearing on completion of the cure. Hysterical, neurasthenic, psychic and moral troubles, are also produced by different affections of the prostate, viz.: senile hypertrophy, acute and chronic inflammations In cases of chronic prostatitis of blennorhagic origin, or consecutive upon aphrodisiac abuse, patients sometimes fall into a condition of permanent insomnia, melancholy or hypochondriasis, which may be cured by a few applications of the nitrate of silver. In another case of prostatic hypertrophy, with all the other consequences of the disease, chronic cystitis, etc., the patient became subject to continuous melancholy, had no desire to see his child, to whom he was much attached, nor his wife, nor parents.

After irrigation of the bladder with corrosive sublimate, 1 to 3,000, boric acid, etc., with a general tonic treatment, and after instructing him how to use the sound twice a day, his melancholy left him, with complete restoration of his health, corporeal and psychic. Castration has been proposed for prostatic hypertrophy, and the operation of Ismardi practised to determine its effect upon the psychic and bodily health. Instances have been reported by Canellis, Papadakis, Cambains and others, of psychic troubles caused by varicocele, monorchidia, cryptorchidia, hypospadias of perineo-scrotal form, etc., malformations of the penis and bladder that may cause perversions of the intellectual faculties and sympathetic mania. From the above the following conclusions are legitimate: First: That in the forms of sympathetic mania there are no organic lesions. Second . That the mild forms of mania present themselves in neuropathic individuals with congenital malformations, or affections of the genital or urinary systems. Third : That sympathetic forms of mania may be ameliorated or cured completely by an operation or by treatment addressed to the genito-urinary system itself. Fourth : That many individuals in whom there are congenital malformations, or acute or chronic diseases of the genito-urinary system, may involuntarily commit crime or suicide because the equilibrium between the intellectual and corporeal faculties is broken, or because their moral nature has become disordered. For these reasons penal justice should see to it that such persons should not be punished unjustly and sometimes even cruelly. Before deciding upon the punishment of a criminal or an individual accused of some legal infraction, a minute medico-legal examination should be made of the genito-urinary system and of the neuropathic antecedents, and in many instances judicial opinion would be changed and modified as to the punishment to be inflicted upon the accused.

"SOME DUAL PROPERTIES IN MEDICINE."

By Ben. H. Brodnax, M. D., Brodnax, La.

HAVING occasion some time since to answer a sort of "slash" (by a friend of mine) at Homœopathy, I asked him a few questions. Among them was whether he knew really what were the effects *in full* of any one medicine contained in our pharmacopœia. *Carbolic acid*, for instance, will destroy healthy cuticle, the same as nitric acid. It benumbs, not causes, pain, like the other. But if put on a raw, burned or scalded surface, or a knife cut, it instantly—yes, instantly—when coated over the raw surface, covers it with an impermeable surface. Pain instantly ceases, and a new skin forms under it within comparatively a few hours. Did this seem natural? Yet it was not the less a fact. Add to this that it splits up in the body, and acts as heavily on the kidneys as on the stomach and intestines.

Castor oil in full dose purges, with griping and intestinal pains; yet 10 drops, if administered every half hour, will in a very few doses check a diarrhœa, with no tenesmus.

Turpentine in full doses, or in large ones, will produce inflammation, purgation, tenesmus of the bladder, increased flow of urine, strangury, while in 2 to 5 drop doses none of these symptoms appear, but in some cases, the majority, the bowels are checked, soothed and healed, the bladder is cooled, kidneys relieved, and the irritated urethra cured.

Iodide of potassa in full doses, pushed to tolerance of stomach, will produce great systemic disturbance, causing most distressing pains and producing some most frightful skin eruptions. In small doses it corrects all these where they have existed prior to administration of the drug.

Tartar emetic, said to have been, in old times, "a very much abused and too much used" drug, and now ignominiously kicked out entirely by the "regulars," will in ¾ to 1 grain doses "puke and purge," while in 1-12 to 1-16 grain doses, every 15 or 20 minutes, either dry or in solution, will very quickly (sometimes the first dose) quiet distressing nausea and stop persistent vomiting from irritability. These are a few facts which are hard to account for.

Nitrate of silver, a most powerful caustic to the skin and mucous surfaces in any amount, will, if given ⅛ to ¼ grain by mouth in solution, heal inflammation of the mouth, throat, and almost instantly cure an inflammation of the stomach, producing in a very few minutes the most agreeable and refreshing sensation of coolness where an instant before pain, thirst, nausea all combined had created a little hell in itself. Is it not a little curious and worth inquiring into the "why" of such a miraculous change?

Ipecac, the "devil's broth" with children (and grown up children, too) vomits and purges in full doses in solution, causes an irritation of the mucous tracts that produces the most distressing diarrhœa. If made into a bolus of 10 grains will, it is said, check vomiting and diarrhœa, but in 1-8 to 1-16 grain every half hour, in solution or powder, check pain, purging and fever. "Pure contrariness," you say. Well, for all that, it needs only a little rubbing the fur the right way with any medicine to make it purr.

Chloral hydrate, as an hypnotic, acts best on the nerves through the blood; as a sedative by the same; caustic in proportion to the strength, as an injection with boric acid into the bladder in case of cystitis; as a gargle and to swallow in sore throat, applied by means of a pledget of cotton saturated solution to ulcers in throat or vagina, has no equal. With equal parts of carbolic acid, say 10 grains each to 2 or 3 ounces water as an application to skin in urticaria; or diluted to 4 ounces to infant skins suffering with hives, measles, scarlet fever, etc., soothes and stops the unpleasant itching.

Belladonna dilates the blood vessels in full doses, checks hemorrhages, acts on the sphincters so as to relax; at the same time prevents undue engorgment of the capillaries in small doses.

Morphine is in some a sedative, even in full doses. In 1-12 grain every half hour it has not so much of the stimulating effect. In some cases it acts as an intense stimulant, only showing its sedative power when it has worn out the patient. As a sedative it is unsatisfactory every way, not only in its present effects, but the sequelæ are worse, leaving the patient worse off than before, taking in every way, plus the craving for more. It is a safe thing, every way, to combine morphine with chloral hydrate or soda bromide to counteract the stimulant stage.

Calomel.—Ten one-tenth grain granules, half hourly, will often act more powerfully and surely than 5 or 10 grains given at one time, also is free of the griping and nausea; acts more constitutionally. Combined with 1-10 grain podophylin the effect is more pronounced. Also it is noticeable that somehow it splits up in the 1-10 grain doses, and acts with as much force on the kidneys as on the bowels. It seems to me somewhat strange that calomel should, in acting in this way through the blood, *not* produce salivation while acting on the kidneys; while, if it does not, in some scorbutics, act that way, it produces blood poisoning, as shown in salivation. It has been a curious study to me, this splitting up and double action of some drugs.

Santonim acts powerfully on the intestines by expelling lumbricoides; at the same time as effectually on the kidneys, and quiets the urinary organs. Is a safe drug in 3 to 5 grain doses in dysmenorrhœa, thrice daily. Is a pleasant remedy in cystitis from this latter quality. I had an experience recently with a very dignified old lady. Prescribed 5 grains in capsule, t. i. d., for three days, with compound cathartic on three nights. She very forcibly called my attention to the "extraordinary color of her urine," which had been passed without the use of a catheter. At same time: "Doctor, I passed about a dozen worms which looked to be as old as I am, and I believe they were." Some of them were over a foot long. I remarked that "I had suspected something of the kind." To this day I think the old lady looks a little cross-eyed at me over her spectacles. So, for all that, she is in better health, and says she must be getting to be a juvenile again.

Sulphate copper—caustic in any strength—astringent and sedative. In 1-50 grain, soothing and healing to the mucous surfaces, so far every way than copper arsenite, is a disinfectant and antiseptic. In eczema, in strength of 5 to 8 grains to ounce of water, kept applied, will cure severe cases. No better colyrium in eye troubles; or in granular conjunctivitis is a cure if used by rubbing with the crystal twice daily, and dropping in a little cocaine to ease the smarting.

Epsom salts purges and gripes in full doses, while in 5 and 10 grains every half hour or hour it quiets diarrhœa and intestinal pain, and does the purging equally well when that is desired.

Glonoin (nitro-glycerine), is a heart tonic and stimulant. In rheumatic pains and other neuralgias, acts promptly as a hypnotic in doses of 1-75 to 1-100 grain, half hourly and hourly.

Quinine arsenite, in 1-67 grain doses every hour for five to eight hours, will produce quininism almost as quick and effective as full doses of 3 to 5 grains hourly of the sulphate alone. Given in 1-30th grain will act better than quinine alone in full dose.

Phytolaca decandra, fluid extract, will, in full doses, sometimes produce excessive vomiting; in ½ and 1 drop doses is a sedative, excellent in fever and in inflammatory enlargements of the glands. Topically, in infusion in mastitis, full strength, applied to stings of bees and yellow-jackets (according to Brother J. J. Waller, in *Med. Summary*) almost instant relief. By the way, talking of stings, I was at a house recently when one of the small boys came running in, howling at the top of his lungs, and frantic with pain from a sting of a hornet. I suggested to his mother to dip a rag in "chamber lye" (urine) and bind it to his hand. In a few minutes the pain ceased, he stopped his racket and began to take in the surroundings.

Strychnine, in toxic doses, is highly excitant of the nerves, causing death by over stimulation, etc. In small doses, 1 67 to 1-134 is a splendid nerve sedative. In combination with arsenic no better drug can be found in neurasthenia and perverted nerve action. Its effect was recently very noticeable in a case of "sweet taste to everything" in an invalid lady; the unpleasant symptoms disappearing rapidly and a return of normal appetite in a very few days.

Acetanilide in some cases produces slight cyanosis, if given in full 8 or 10 grain doses; in some idiosyncracies are more pronounced; given preceding a chill, or after it has come on, 5 or six grains will counteract the cyanosis, equalize the circulation, and a sweat follows with amelioration, or cessation, of all unpleasant symptoms. In full 5-grain doses the immediate effect is a pleasant warm glow, as if some stimulant had been taken, followed by pleasant sleep if one lies down. Now if acetanilide is a heart depressant, why this glow of warmth, equalization of circulation, and restful feeling which follows? Even when fatigued almost to insomnia, 5 grains "sets you up" so that restful sleep follows, the same as a glass of wine would produce, and if tired the less amount of 2 or 3 grains acts to rest one and refresh in every way. Is it a heart depressant? I say no. In a case recently, in the Northwest, ¼ of an ounce, 120 grains, was taken in six hours. The sixteen hours following, during which the cyanosed individual was recovering, the pulse and respiration *were normal.* Dr. Cyrus Edson praises ammonol as a *stimulant*, and also recommends it in the treatment of malarial fever, in place of quinine. In the June issue of the *Charlotte Medical Journal* Dr. Eccles says ammonol is composed of acetanilide, 6 parts; bi-carb. soda, 3 parts; bi-carb. ammonium, 1½ parts. Five to fifteen grains, as to age, is the dose recommended by Dr. Edson, which is about 3 to 10 grains, as to age, of the acetanilide.

There is *considerable* "duality" respecting this drug, not only in its effects, but in the opinions expressed relative to the "whys" of its action.

CHRONIC ULCER OF THE LEG.

By W. F. Morgan, M. D., Leavenworth, Kan.

IN this journal for December, 1895, I reported "two cases of traumatism," one of which resulted in an ulcer of the leg, which was cured after resisting various therapeutic measures tried by various physicians, for about thirty-three years.

As nearly every physician in active practice probably has on his hands one or more of these cases, usually regarded as among the *opprobria medicarum*, I wish now to report another, which, like the one above referred to, is intended chiefly for the encouragement of the young or the inexperienced practitioner. November 31, 1895, I was called in consultation by Dr. C. M. Moater, of this city, to see Mrs. B., æt. sixty-eight, with the following history and present status: The sore, located upon lower third or right fibular region, at the time of Dr. M's. first visit to the case, was about 2 x 4 inches in size. At date it was of circular form, one inch in diameter, still painful and suppurating, and had resisted for about six months all efforts to heal it.

Now, the problem was to lift this patient out of a condition which had persisted without appreciable change for the past six months, and for this purpose I advised elevating the limb to an angle of thirty-five to forty degrees and the constant irrigation of the ulcer with water at a temperature of about 100 to 110° Fahr. At the end of six weeks of this treatment we still found very slight decrease in the size of the sore, although it presented so healthy an appearance that I applied a skin-graft of a size to completely cover it, which adhered promptly and firmly. Zinc sulph., iodoform, boracic ac. and ichctryol were used locally. With the usual fluctuations characterizing the course of chronic disease, we had the great satisfaction at the end of about five weeks to find the ulcer completely healed for the first time in twenty-six years, and our patient declared herself to be more comfortable than she had before been during all this long period. At the time the attending physcian first saw Mrs. B. both her legs were so greatly enlarged that he was disposed to accept the diagnosis of elephantiasis previously made by one of the former numerous medical attendants, and as there seems a strong tendency toward a relapse it may possibly be either true or pseudo-elephantiasis, as we find that a relapse can only be avoided by constant and judicious care. This patient has had the too common experience of those afflicted with an obstinate disease. She soon fell into the hands of the peripatetic professional sharks, who made such heavy drafts upon her credulity and her purse that both were finally exhausted. When these sufferers with ulcers which have existed for a generation, more or less, are also afflicted with superstition, ignorance and *dirt* we have a combination of obstacles very difficult, and in private practice often impossible to overcome, but when, as in the case of Mrs. B., the patient is tractable and sufficiently intelligent, the disease will generally yield to faithful and scientific treatment.

METHOD OF CLOSING ABDOMINAL INCISION.*

By TURNER ANDERSON, M. D., LOUISVILLE, KY.

I will show you two patients I recently operated upon by abdominal section, to illustrate the method of closing the abdominal incision by means of buried silver wire sutures. I have been told that this method has not been practiced by any other surgeon in Louisville, though it has gained some popularity in the East, notably in the service of Prof. Howard A. Kelly, in the Johns Hopkins Hospital, Baltimore. This method of closing the abdominal incision was explained to me while East some months since, and at that time I made the remark that I believed it to be decidedly unsurgical; that the wire would act as a foreign body and be the source of subsequent trouble. Since having tried this means of closing the abdomen, however, it has proven so satisfactory, that I thought the matter of sufficient interest to bring before the Society. I have used silver wire in several cases, two of which I shall exhibit, and the results have been very satisfactory in contrast with some other cases where I have had to remove silkworm gut sutures afterwards, etc.

The first patient is twenty-eight years of age, mother of two children. Eleven months ago she first noticed an enlargement in the right side of the abdomen. She applied to me for treatment two months ago and I diagnosed the condition as ovarian cystoma, and operated upon her a few days later, removing a suppurating ovarian cystoma, which contained about a pint of pus. The abdomen was closed with five buried sutures of silver wire; union took place without suppuration and she has had absolutely no trouble. She does not complain of any sticking sensation, or any pain from presence of the wire. The skin was closed by the sub-cutaneous or Halstead method. The peritoneum was first stitched with catgut, following that the fascia sutured with silver wire, lastly the skin sutured sub-dermally with catgut. This wire, of course, remains in the tissues permanently, and when healing is complete the wound is perfectly smooth. In this case, as you will observe, only the faintest line can be seen at the site of the incision.

As already indicated, when I first saw this method of closing the abdomen it seemed to me unscientific and unsurgical, and I very promptly said so. I gave as my reason that we were compelled to depend upon vital and not mechanical processes for the healing of wounds, and that it did seem to me healing dependent upon mechanical process would not be satisfactory. I was told, however, that the method had stood the test of more than two years, Dr. Halstead having employed the method for this length of time, closing the incision by the buried silver wire suture by the ordinary terraced method. No trouble had followed his operations when this method was employed.

Case II.—The second case was also operated upon for ovarian cyst, which was much larger than in the previous case. The incision was longer, and six sutures were used in closing it. This case, as you see, is equally as perfect as the first, the very slightest evidence remaining of the wound in the abdomen.

DISCUSSION.

Dr. A. M. Vance: It is too early to say positively what will be the outcome of the cases shown by Dr. Anderson, but certainly the cicatrix seems to be firm, and the scar is as pretty as I have ever seen. I have never closed an abdomen by the method he has described; in fact, my attempts to bury silver wire in the tissues have entirely failed. I usually use wire in suturing bone. I have adopted one set method of closing the abdomen, and have had only one ventral hernia resulting from abdominal section. That was a very small hernia occurring at the lower angle of the wound. The operation was for an ovarian cyst, and the case was reported to this Society at the time.

So far as my experience goes, I believe Dr. Anderson's first impression of the silver wire suture in abdominal work—that a mechanical apparatus left *in situ* was a false idea, as it would certainly cut the tissues and come out—is about the correct one. With a small incision and a thin abdominal wall, I think silkworm gut sutures passed directly through answer very well. I do not believe the centipede-like scar makes much difference unless it takes on keloid action, which sometimes happens.

Dr. J. G. Cecil: I have had no experience with the silver wire suture in abdominal work. It seems to me, however, that the appearance and the condition of the cicatrices is the best argument that can be offered in favor of the suture. I have never been at all attracted to the silver wire suture, from reading the accounts and what I have seen of it. It has never occurred to me that it was necessary to introduce a permanent suture. Other methods have been so satisfactory that I could not see the necessity of burying an insoluble material in closing the abdominal wound. However, if they all turn out as well as the cases Dr. Anderson has shown us, it certainly must be a good suture.

Dr. L. S. McMurtry: One thing we must all concede, in considering a question like that of closing the abdominal incision, and that is that a variety of methods may obtain equally good results. One surgeon may adopt methods different from another to secure the same end; one may have greater dexterity and work with more facility by a preferred method. There are a great many different ways of closing the abdominal incision. The method adopted by Dr. Anderson is that practiced by Dr. Kelly and others. Edebohl's method preceded Kelly's method, differing only in using silkworm gut, where Kelly uses silver wire; both are after the method of Marcy. Marcy's plan was to suture in layers with buried absorbable animal tendon. Edebohls and Kelly do the same, with the substitution of non-absorbable material in the aponeuroses. The method which is more generally adopted is the procedure practiced by Tait, Bantock, Price and most abdominal surgeons, which is to use a box stitch, described by Greig Smith; passing a silkworm gut suture close to the margin of the skin, carrying it down from the point of introduction until it reaches the middle of the muscular layer, bringing it out near the peritoneal margin from this point, so as to make the strongest tension on the muscular layer. After union the suture is entirely removed, leaving nothing behind.

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*Reported to the Louisville Surgical Society. Stenographically reported for this journal by C. C. Mapes.

The method of closing the abdominal incision that has been described by Dr. Anderson to-night is an excellent procedure, but I do not believe it is the best method, and Dr. Anderson himself has stated the strongest objection to it, viz.: the union of several tissues should be vital, not mechanical. I saw in Atlanta during the holidays a silver wire suture that Holmes had removed from the cervix of a woman, which had been put there by Marion Sims, who had overlooked it; twenty years later it gave trouble and had to be removed. The greatest objection I see to any method of terraced suturing is that it prolongs the operation. Take the expert operator and he may be able to put in several layers of stitches with a great deal more facility than another operator who is not so expert; but take the average operator and the best method is the one which he can perform the quickest. The method of through suturing with silkworm gut is the most rapid; it forms a perfect support to the tissues until union takes place; it makes the strongest pressure over the muscular layer, which is an important point in the prevention of hernia; and lastly, after the wound has united the suture is removed and you leave nothing behind. We often have operations in abdominal surgery where the patient's life depends upon abbreviating the anæsthesia by ten minntes. I can recall operations where a matter of five minutes would have been very serious. In these emergency operations of course the quickest method is the best. But if you have an operation of election where you can do just as you wish, then you have an opportunity of choosing between the various methods.

The ordinary cicatrix resulting from the box stitch neatly applied, is very slight. I have seen a number of my patients a year or two after operation and the cicatrix presented merely as a minute white line. So for the cosmetic effect I do not see any advantage of buried sutures over other methods of suturing. The great advantage of other sutures over silver wire is that they can be more rapidly applied, and after union has taken place the sutures are removed, nothing being left to cause after trouble.

As to the question of hernia following abdominal operations: I do not think there is any better method of suture that will do more to prevent hernia than the silkworm gut passed through and through. If this is carefully and properly done I do not believe ventral hernia will occur any more frequently, or as frequently, taking the number of cases operated upon, as by any method of terraced suturing, because the parts are brought together and maintained in accurate apposition until organized union is established, and no foreign substance is left in the tissues.

Dr. A. M. Cartledge: I believe that any method of closure of the abdominal incision may be very good, or it may be very bad, depending entirely upon the way in which it done. This is the key note to the whole situation. As Dr. McMurtry has said, the through and through suture, properly applied, is in all respects as good and produces equally as small a scar as where you use the Halstead suture, and another thing in its favor is that the suture can be quickly applied. A great deal of valuable time it lost in bringing the different structures together separately, and I believe when we have learned to apply the through and through suture, if our silkworm gut is perfectly clean, and if all blood is carefully wiped away from between the surfaces, our results will be as good by this method as by any other, and the occurrence of hernia following the operation will not be frequent. I had several ventral herniæ in my early abdominal work, which I now believe were due to the fact that I did not know how to close the abdomen; did not know how to apply the suture properly.

In regard to the technique presented to-night: Certainly the cases shown speak well for the method so far, but I was glad to hear Dr. Anderson says that the union must be vital and not mechanical to secure a perfect result. We all recognize the fact that we must get vital and not mechanical union in these cases, and if a suture is left in order to make a permanent stay, you leave a foreign substance in the abdominal wall to excite irritation and suppuration, which is like to cause after trouble. For one, I do not believe that two years is a sufficient time to test this method of suturing the abdominal wall. Three weeks ago I removed a silver wire suture used in a herniotomy last September, in which there was union by first intention over the silver wire. There has been since the opertion some slight irritation; finally a little pimple developed which sloughed in the center, causing more or less pain. I made a small incision and removed the silver wire suture, closing the wound by the Halstead method. Sometimes when silver wire is embedded in bone it becomes the source of irritation and causes suppurative trouble. Certainly this would be more apt to occur when applied to the abdominal walls. Irritation and sepsis are elements of danger always to be considered in these cases, and while the patient remains in an excellent state of general health no trouble supervernes, but if the patient's health suffers from other causes and she becomes run down, irritation from the foreign body is likely to be productive of serious results. I do not agree in the statement that anything is to be gained by mechanical support of a silver wire suture in closing the abdominal wound, for we must remember that union must be vital; the silver wire is a foreign body, and after union takes place mechanical support is not needed; therefore, if we can obtain union without leaving a foreign body in the tissues, it seems to me this would be vastly preferable. I believe this can be done by means of the through and through catgut suture, to be left six or eight days; by that time the fascia will have united, and I would use catgut here as well as in the muscle and skin. It has been claimed, however, that you can get better apposition by the Halstead buried suture and a little less scar. If I am going to use a terraced suture at all, I prefer catgut. After all, no matter what method you employ, it depends more upon the way you do it than what you do it with. I have not had a ventral hernia in three years' use of the through and through suture. I have had stitch abscesses that may have been due to this method of suturing, but I believe if we are careful in not drawing the sutures too tight that this can generally be avoided.

Dr. W. O. Roberts: I have seen Dr. Anderson use the silver wire in closing the abdominal incision in a number of cases, and have used the same method myself on my last two cases. These patients are now convalescing, and in both of them the results are as good as in those Dr. Anderson has presented. I am quite favorably impressed with the silver wire suture for this class of work, because I think it gives better approximation than the throngh and through suture; by the through and through suture in many cases we do not get as perfect coaptation of the aponeurosis as we ought, and for that reason I believe this is a better suture. Then again, with the through and through suture, as Dr. Cartledge has said, we not infrequently get stitch abscesses. The only question is whether or not this silver wire will give any after trouble; I am inclined to think it will not.

Dr. James Bullitt: A word or so about the occurrence of stitch abscesses: I believe it is a recognized fact that no matter how well the skin may have been rendered aseptic beforehand, if the suture is introduced through the skin from without, a stitch abscess may result from infection by the staphylococcus epidermides albus, which may have been imbedded in the deeper layers of the skin and carried along with the suture. Stitch abscesses may also result from mechanical strangulation by drawing the sutures too tightly. Any suture which penetrates the skin is liable to carry infection with it. Owing to the fact that the through and through stitch takes in so much tissue, especially in a fat abdomen, in which the circulation is naturally very poor, strangulation will be considerable, and infection from the stitch carried through the skin may occur, no matter how perfect the aseptic precautions may have been beforehand. The terracing does away with this difficulty; employment of the Halstead sub-cutaneous suture practically does away with this possibility of infection, the stitch not being carried through the skin. It seems to me in that respect the Halstead method of suturing is a decided advance in the right direction. The small scar left is another thing which speaks in its favor, because for cosmetic reasons the smallest possible scar is advisable. One of the arguments advanced by some authorities for vaginal versus abdominal hysterectomy is that no scar is left. A great many patients object to carrying large scars on the abdomen for the balance of their lives.

Dr. Turner Anderson: I stated when I saw the first abdominal incision closed by means of the silver wire suture, and was told that it was an absolute safeguard against ventral hernia, having had some experience in hernia following abdominal operations, that I could not accept the statement on any theoretical reason. I said that we had to depend upon vital and not mechanical principles for the prevention of hernia in this situation, and I could not see any particular advantage in the use of the silver wire. But when I investigated the matter further, having the assurance of Dr. Kelly that it was a method he had used for a considerable length of time, and that it was a perfectly safe and most satisfactory method, as he has had a very large experience in this line of work, I consented to try it myself. I simply bring here the fruit of two cases in which this method was used. It is a question that time only can decide, whether this method is superior to others in practice. While I recognize that a few cases are not sufficient on which to base any positive conclusions, still, if there is a multiplication of cases resulting as satisfactorily as these, I shall continue to employ this method of suture. I think it would be my duty to do so. I fully agree in what Drs. Cartledge and McMurtry have said concerning the success attending the different methods of closing the abdomen, and of course we all recognize the importance of closing the abdomen quickly in emergency cases. It is my belief, however, that the method I have suggested can be carried out quickly enough so as not to endanger the life of the patient. If we had a sinking patient, however, and it was necessary to get her off the table at once, closure might be effected more rapidly by some of the other methods. We should not have sinking cases, as a rule, but if we do have them, then we might not have time to close the abdomen by the method I have described. We are not apt to have sinking cases if we are careful about the anæsthetic. With the patient in the Trendelenberg posture, and with ether as the anæsthetic, I think most any operable case can be taken through and gotten off the table without any great haste.

Dr. W. C. Dugan: This patient, female, æt. about twenty-six years, is one whom I operated upon fourteen months ago for carcinoma of the rectum. I simply exhibit the case on account of the interesting clinical features it presents. At the time of the operation it was thought almost useless to attempt any operative procedure, because of the extent of the trouble. I made a brief report of the case shortly afterward and presented the specimen removed, which was about six inches of the lower part of the rectum. Now here you see the result; there is no prolapse whatever, and she has had no trouble with the bowel except when she has diarrhœa, when there is more or less incontinence. There has been no extension of the malignant process thus far. Union as you will observe is perfect, with the exception of one very small point along the anterior part. She was in a pitiable condition before the operation, as the obstruction was almost complete; she had lost a great deal in flesh. When examined it was ascertained that I was able to introduce only the tip of my little finger into the structure, and that by using considerable force. An incision about an half inch from the verge of the anus was carefully made, the skin dissected up and the external sphincter muscle cut so as to allow the bowel to be drawn down. Now to control the bleeding in the wound a half dozen forceps were applied to the loosened end of the bowel, and these acted as tractors, drawing the bowel down until the mass was brought into view. I was careful in the dissection not to enter the peritoneal cavity, and after working around the cancerous tissue and getting the mass down sufficiently low, it was excised. I have no idea how much of the bowel I could have drawn out in this manner, for the higher I went the easier it was pulled down. Next to the vagina the growth extended much higher, and I found when I had drawn the bowel out beyond the growth on the posterior part there was a second mass a little higher up on the other side, so that the bowel had to be drawn still further down, in order to include the second mass in my incision. I do not wish to be understood to say that these two masses were entirely disconnected. I was very much surprised at the ease and facility with which the bowel could be drawn down in operating by the method employed in this case. By introducing the finger into the vagina and another into the bowel you can feel a little induration on the side toward the vagina, that is in the recto-vaginal septum; I had not made an examination per rectum for quite a long time, until I saw her this morning.

I want to say in connection with the case, that this patient practically died upon the operating table; she was to all appearances as dead as she can ever be for several minutes. She was suspended, artificial respiration was practiced, and she was finally brought to. It has been fourteen months, and there are no indications of recurrence of the disease. The patient has gained in flesh, her appetite is good, she feels perfectly well, and the bowel gives her absolutely no trouble.

I remember when the specimen was presented the Fellows of the Society were not disposed to give anything like a favorable prognosis, and I confess the condition is quite different to what I expected at the time of the operation. But it goes to show what we may hope for, even in these advanced cases. I prefer this to all other methods of operating.

THE WILLIAM F. JENKS MEMORIAL PRIZE.

The fourth triennial prize of $400, under the deed of trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on "The Etiology and Pathology of Diseases of the Endometrium, Including the Septic Inflammations of the Puerperium."

The prize is open to the competition of the whole world.

The essay, which must be written in the English language, or, if in a foreign language, accompanied by an English translation, must be sent to the College of Physicians of Philadelphia, Pa., before January 1, 1898, addressed to Barton Cooke Hirst, M.D., Chairman of the William F. Jenks Prize Committee.

Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, and containing the name and address of the writer. No envelope will be opened exeept that which accompanies the successful essay.

The *Economic Journal* prints an article contributed by Prof. E. S. Nitti, giving the annual consumption of flesh meat per inhabitant, as follows: United States, 120 pounds; Great Britain, 105 pounds; France, 74 pounds; Germany, 69 pounds: Belgium, 69 pounds; Holland, 69 pounds; Scandinavia, 67 pounds; Austria, 64 pounds; Spain, 49 pounds; Russia, 48 pounds; Italy, 23 pounds.

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REMOVAL.

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Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 108 Fulton St., N.Y.

ANTITOXIN.

THE recent discussion of antitoxin before the Academy of Medicine and the American Pediatric Society's report of an extended investigation have brought together so many valuable facts, and presented the arguments, *pro* and *con*, with so much ability and fairness, as to greatly aid us in determining the present status of the question, even though its final settlement be still remote. The most important point established by careful study of the data thus collected is the utter worthlessness of the method necessarily pursued hitherto in estimating the results of serum treatment, viz.: by comparison of *percentage mortalities*. A marvelous showing has in this way been made on behalf of antitoxin in the Pediatric Society's report, and in a long array of hospital statistics adduced during the Academy debate. But, "on the other hand" (as the *American Medico-Surgical Bulletin* puts it), "when we review the grand total mortality, as recorded per 10,000 population, the number of deaths from diphtheria has scarcely been lowered in any perceptible degree, thus showing, by the brute force of figures, a very wide difference between the percentage and the grand total mortality in this much-dreaded disease."

Dr. Winters' main position we believe to be unshaken by the sneers of his opponents: "If there is at work but a single factor, viz., antitoxin, in the reduction of mortality, that reduction must be below the lowest mortality recorded in the natural history of the disease in any part of the world, and it must be steadily maintained below this rate in all parts of the world; otherwise the variations in mortality may be said to be due to the epidemic character of the disease."

"Percentage mortality is not only misleading, but is absolutely worthless unless accompanied by the actual number of cases reported and the actual number of deaths, and the report must also include a series of years, in order to enable the reader to compare present results with the results in previous years, when there was a mild type of the disease."

Compare this mode of looking at the subject with that adopted by Prof. W. H. Thomson on the same occasion, set off as it was by a parade of logical accuracy amusingly out of keeping with the real character of his remarks. "As it is both wearying and difficult for an audience to listen to tables of figures," he very kindly endeavors "to shorten this task by limiting it to one aspect of the subject only, namely, the verdict of hospital reports on the comparative mortality in the treatment of diphtheria with and without antitoxin." And again: "The subject in debate is whether the treatment of diphtheria by antitoxin, when compared with other methods previously employed, shows a greater percentage of recoveries or not. All discussion not limited to this plain question is a waste of words."

The coolness of these assumptions—the direct and the implied—extends also to the speaker's method of handling statistics, as shown in his citation of Soerensen's report of results from antitoxin in Blegdam Hospital.

The actual value in this case of "comparison with other methods previously employed," was very clearly exhibited by Dr. William L. Stowell, who, before giving his results in treatment, quoted "What Success Has Attended Other Remedies than Antitoxin." He said: "In one evening I noted more than 7,000 cases, with a mortality of 8.8 per cent., and this without including reports of 571 cases with only six deaths, and the like. Most of them are from private practice." A few years ago (the London *Lancet* says), when diphtheria was raging in England, the "celebrated Dr. Field" went about performing wonderful cures with nothing but powder of sulphur and a quill. With these he cured every patient, without exception, while the patients of others were dropping on all sides.

The sum and substance of the whole matter, we apprehend, is this: When it shall be ascertained that, under the use of antitoxin, the absolute number of deaths from diphtheria, throughout the civilized world, has markedly decreased during a series of years, then, and no sooner, may we declare, with full confidence, that the remedy has triumphed.

Meantime, however, the most striking and encouraging feature of the Pediatric Society's report must not be overlooked. We refer to its testimony as to the power of antitoxin to control laryngeal diphtheria—the most fatal form of disease. "Among 1,256 cases of croup, 563 recovered without operation. Including all hopeless and moribund cases, the death rate among 503 cases of intubation was 25.9 per cent., less than half the lowest rate hitherto reported." These results are in agreement with those published by the London Metropolitan Asylums Board, and by Von Ranke and others in Germany. We do not see how they can be explained away. While they cannot be called conclusive, they certainly afford good ground for hope, and incite to perseverance if they do not justify enthusiasm.

With regard to antitoxin immunization, the weight of evidence seems to be decidedly against this practice. There is little doubt that, as Dr. Stowell said, "cleanliness and ventilation will immunize as well as hypodermic serum," and since the latter is admitted by its strongest advocates to be not without danger, why expose healthy subjects to unnecessary risk? In view of unfortunate accidents like the death of Prof. Langenhans' child, it may be pertinent also to ask: If the first eighteen months of *vaccination* had produced any such results, should we now be celebrating the centenary of Jenner?

INSPECTION OF CHARITIES.

THE State Board of Charities, in addition to their wide range of power granted by previous Legislatures, at the last session were invested with still larger power in the supervision of charitable organizations. They are now required to visit, inspect and maintain a general supervision of all institutes, societies or associations which are charitable or reformatory, whether State or municipal, incorporated or not incorporated.

There is a growing feeling in and out of the profession that free dispensaries have within the past few years increased to a larger extent than is needed for the really poor, and that in this way a large amount of money is yearly diverted from the broad and ever thirsty channels of true charity to furnish medical aid to thousands who can well afford to pay.

To thoroughly investigate this matter, and with ample power to act in case action is needed, the State Board of Charities has appointed a committee, consisting of Dr. Stephen Smith, of New York; Tunis G. Bergen, of Brooklyn, and Dr. Stoddard, of Rochester, to thoroughly investigate the free dispensaries of the great cities and the State, and see if they are doing an amount of good which would warrant their being kept alive, or if evil may not arise from their accumulation that may prove an injury to the medical profession and an unnecessary tax upon the charitable. It is common with many dispensaries to charge a small fee, say five or ten cents for each prescription, enough to defray a part if not the entire cost of the medicine to the dispensary. Some of the dispensaries are chartered simply as charitable institutions, and by their charter have no right to charge even the smallest fee. This committee recently appointed will have the power to regulate these matters satisfactorily, to both the best interests of the institutions and the profession.

LAPAROTOMY FOR PTOSIS.

PERHAPS the latest extension of the application of abdominal section is to the treatment of Glenard's disease. Mr. Frederick Treves, in a recent number of the *British Medical Journal* (*Medical Record*), gives a description of this trouble, and reports a case in which he opened the abdomen for the purpose of relieving the condition. Glenard's disease, or abdominal ptosis, can hardly be called a disease at all, but is a series of symptoms, more or less definite, depending, it is supposed, upon relaxation of the abdominal wall and of the supporting ligaments of the viscera. The right bend of the transverse colon is first to fall, then the stomach is drawn down, then the rest of the transverse colon, and, finally, the whole mass of the small intestines becomes prolapsed. The liver and kidney become loose and are described as floating. The result of these conditions depends necessarily upon the extent to which the ptosis has involved the viscera. There are general disturbances of an anæsthetic character, nervousness and hysterical phenomena, and dyspeptic obstruction of the bowels, sense of weight and dragging, and pain over the region of the viscera.

Mr. Treeves' case was that of a young woman who had suffered from this condition for a long time. He advised the operation of laparatomy, and found that the liver and stomach were low down. The great omentum was rolled up into a round and rigid cord, and fixed in a collection of old tuberculous glands, situated in the mesentery of the ileum. These glands were removed and the viscera replaced. The patient made a good recovery and was much improved.

Mr. Treves' case will probably set surgeons to work upon this new field, which, we trust, will be explored with wisdom and caution.

YOU NEVER CAN TELL.

TRUTHS formulated in the language of poetry often produce a stronger and more lasting impression than when written in plain, homely prose. The great thoughts which Ella Wheeler Wilcox has clothed with such poetic beauty and strength embody a sermon so pregnant with suggestion and truth and applicable to all, that every physician as he reads it in the quiet of his summer vacation will thank the gifted authoress for the truth and beauty of her utterance:

You never can tell when you send a word,
Like an arrow shot from a bow
By an archer blind—be it cruel or kind—
Just where it will chance to go.
It may pierce the breast of your dearest friend,
Tipped with its poison or balm ;
To a stranger's heart, in life's great mart,
It may carry its pain or its calm.

You never can tell when you do an act,
Just what the result will be ;
But with every deed you are sowing a seed,
Though its harvest you may not see.
Each kindly act is an acorn dropped
In God's productive soil,
Though you may not know, yet the tree shall grow,
And shelter the brows that toil.

You can never tell what your thoughts will do
In bringing you hate or love ;
For thoughts are things, and their airy wings
And swifter than carrier doves.
They follow the law of the universe—
Each thing must create its kind—
And they speed o'er the bank to bring you back
Thatever went out from your mind.

AUTOTOXIC INSANITY.—At a meeting of the Medical Society of London, on May 11th, Dr. Allan McLane Hamilton, of this city, read a paper on the connection of autotoxis with certain forms of insanity, in which he considered at length the dependence of certain forms of psychic disturbance on the absorption of the soluble products of intestinal putrescence. The following were the conclusions of his paper: (1) Urines rich in indican contain very little or no preformed sulphuric acid, and are toxic ; (2) when the sulphate ratio is materially changed it probably indicates autotoxis in connection with an increase in the amount of combined or ethereal sulphates ; (3) such indications are generally found with acute insanities in which rapidly developing symptoms occur ; (4) fugacious and changing hallucinations and illusions, unsystematized delusions, confusion and verbigeration, in connection with insomnia, pallor, intestinal indigestion, constipation, and rapid exhaustion are due to autotoxis ; (5) paranoiac states, or those in which concepts are the main feature, chronic stuporous conditions, and certain forms of dementia have little to do with the formation of the intestinal products of putrefaction ; (6) various post-febrile, traumatic, alcoholic, or drug insanities are those in which autotoxis is most constant ; (7) the variations in the excretions of combined sulphates keep pace in the changes with the progress of an established insanity, *access* and epileptiform attacks being directly connected with putrefactive processes ; (8) the most successful treatment consists in lavage, intestinal douches, gastric and intestinal antisepsis by means of hydrochloric acid, borax, salicylate of soda, charcoal, guaiacol, or naphthalin, in small and repeated doses, associated with the administration of a combination of the red marrow from the small bones, blood, and glycerine.

IN the typhoid fever prevailing at the present time, especially if of a malarial origin, we are very apt, as we approach the period of convalescence, to find even with a more or less acid reaction the urine decidedly offensive and containing, through chemical change in the bladder, more or less pus. A tablet of the *citrate* of *lithia* dissolved in water and repeated three or four times during the day gives a very cooling, efferverscing drink, and in a short time relieves the entire trouble, the burning sensation in the urethra and the bladder entirely disappearing. and the water becoming clear and natural. Should the offensive odor and the pus exist with a strongly alkaline reaction, we are in the habit of giving a 5-grain tablet of boracic acid until the urine shows an acid reaction. Prompt attention to these matters expedites convalescence, contributes decidedly to the comfort of the patient, and removes the chances of permanent catarrhal troubles of the bladder.

LOW DEATH RATE.—It is a very gratifying fact that the death rate in this city the last six months is lower than it has ever been before. In 1891 from January 1st to July 1st, the death rate was 27-11, while in 1896 in the corresponding months it was only 22-32. There has also been a marked decline in the death rate of the so-called contagious diseases, that in 1892 being 3.23, and in 1896 2.06. With the improvements now going on in building and in the management of the public streets another decade ought to make this city the healthiest in the world.

BIBLIOGRAPHICAL.

THE Imperial Granum Co., of New Haven, Conn., has published, in unique and servicable form, a model bedside record called "The Nursing World Bedside Record for the Use of Physicians and Trained Nurses." The book contains sixty-four pages, and may be had gratis upon application and mention of this journal.

PRACTICAL POINTS IN NURSING for nurses in private practice, with an appendix containing rules for feeding the sick, recipes for invalid foods and beverages, weights and measures, dose list and a full glossary of medical terms and nursing treatment. By Emily A. M. Storey. Illustrated with seventy-three engravings in the text and nine colored and half-tone plates. Philadelphia: W. B. Saunders; price, $1.75; 1896.

PRESENT STATUS OF PEDIATRICS. Edited by Benjamin F. Bailey, M. D., Lincoln, Neb., and Allison Clokey, M. D., Louisville, Ky.: 1896.

The object of the editors is to give in a concise form a *resume* of the present status of pediatrics. The articles are prepared by different writers, and as a general thing are well done. The limits of the work do not admit of lengthy discussion, and the authors confine themselves mostly to well established facts.

THE AMERICAN YEAR-BOOK OF MEDICINE AND SURGERY, being a yearly digest of scientific progress and authoritative opinion in all branches of medicine and surgery, drawn from journals, monographs and text-books, of the leading American and foreign authors and investigators. Collected and arranged with critical editorial comments by J. M. Baldy, M. D., C. H. Burnett, M. D., Archibald Church, M. D., C. F. Clarke, M. D., J. Chalmers DaCosta, M. D., W. A. N. Dorland, M. D., V. P. Gibney, M. D., Homer W. Gibney, M. D., Henry A. Griffin, M. D., John Guiteras, M. D., C. A. Hamann, M. D., H. F. Hansel, M. D., W. A. Hardaway, M. D., T. M. Hardie, B. A., M. D., C. F. Hersman, M. D., B. C. Hirst, M. D., E. Fletcher Ingals, M. D., W. W. Keen, M. D., H. Leffmann, M. D., V. H. Norrie, M. D., H. T. Patrick, M. D., William Pepper, M. D., D. Riesman, M. D., Louis Starr, M. D., Alfred Stengel, M. D., G. N. Stewart, M. D., Thompson S. Westcott, M. D., under the general editorial charge of George M. Gould, M. D. One volume of about 1,200 pages, profusely illustrated with numerous wood cuts in text, and thirty-three handsome half-tone and colored plates. Prices: Cloth, $6.50, net; half morocco, $7.50, net. Philadelphia: W. B. Saunders, 925 Walnut street, 1896.

The object of the "Year-Book" is to give in compact form annually an epitome of new and progressive medical truths of the year, as reported in medical literature at large; this information being collected and arranged by eminent American specialists and teachers, under the direction of a general editor. Each associate editor, who is a distinguished practitioner or teacher, critically reviews the material collated and comments upon the value of new treatments and theories. Special training and experience are obviously essential for the accurate choice of those things in the line of true progress, and not only to select and summarize, but also to pronounce decisions upon the merit of a discovery and the value of a treatment. These discussions are carefully arranged and elaborately indexed. Illustrations are liberally introduced, the engravings—many being in colors—are taken from photographs or are reproductions of the authors' cuts, appearing with the respective original contributions to the journals quoted.

The American Dermatological Association will hold their next annual meeting at Hot Springs, Va., on the 8th, 9th and 10th of September. Dr. White will open a general discussion on the subject, "What Effect Do Diet and Alcohol Have Upon the Causation and Course of the Eczematous Affection and Psoriasis."

CORRESPONDENCE.

A VACCINATION "STATISTIC" EXPLODED.

To the Editors of the NEW YORK MEDICAL TIMES:

There is much reprehensible and unscientific talk about vaccination in Homœopathic books, and in one that I have recently examined are several passages that need eliminating or revision. This work is the "Handbook of Diseases of Children," by Dr. C. E. Fisher, 1895. It is not my intention to here write on the subject of vaccination, but to point out the unreliability of an important passage in that work, page 242, reading:

"Governmental reports show that during the Franco-German war of 1870 and 1871 the (smallpox) mortality of the French army, the unvaccinated, was 23,469, while that of the vaccinated German army was 261. From these figures it would seem that vaccination affords almost certain immunity from death from smallpox."

It is not alone because this "statistic" and the deduction from it appears in Dr. Fisher's work that I call attention to it, but it is doing yeoman service elsewhere, and its untruthfulness should be shown. The Brooklyn Board of Health and the State Boards of Rhode Island and Tennessee and numerous medical journals and newspapers are the latest users of it, and Dr. Quine, President of the Illinois Board of Health, used it in his address as President of the Illinois State Medical Society. Its exploding requires a little digging into history, when the following are found to be the facts:

The "statistic" has been traced as a stray newspaper paragraph, which was copied by the *British Medical Journal* in 1872, only the German loss has several times fluctuated greatly. Herr Steiger, Minister of the Interior, in a speech in the Great Council of Berne, February 6, 1883, stating it at 3 162. Dr. W. B. Carpenter, the renowned physiologist, once used the item, and when shown his error publicly apologized, in words I could quote, in the *London Daily News*, August 7, 1872. Dr. Lyon Playfair then used it in his memorable speeech for vaccination in the House of Commons, June 19, 1883, a speech he was making at the bidding of his constituents, whose collar he wore, as Laurie MacKenzie expressed it, at the time. The statistic was discredited on the spot by Mr. P. A. Taylor. Playfair (who in several instances in this speech did not play fair, though he did not meet a Kitson fate), held up Dr. Colin's work on smallpox, saying "I got it from the Physician General of the French army." He was then shown that the statement was not in Colin's book, and that Baron Larrey, not Colin, was Physician General. His speech was printed, and in this the statement was credited to the report of Dr. Thilenius to the Reichstag—German authority for French statistics.

Thereupon a letter was sent to the German War Office, under date of July 6, 1883, asking for a certified abstract of the smallpox deaths in 1870-71. In the reply, signed by Lisonke, Chief Clerk of the Minister of War, dated Berlin, July 30, 1883, the material part of the letter was as follows: "In 1871, three deaths in July, six in August, six in September, ten in November and twelve in December. For the time from July, 1870, to June, 1871 (the twelve months of the war) the numbers wished for are not recorded, and regret is expressed that on this account the desired information cannot be given."

Now for the French side: No official figures exist depicting the French loss by smallpox. They are unnecessary here. The military and sanitary conditions were not at all comparable, especially for such a filth disease as smallpox, as the beleagured French were in bad shape, and the surrounding Germans had plenty of room, so we can easily believe that the French had more smallpox than the Germans. But Dr. Bayard, of the French army, writing in 1872, tells us that the army was not only vaccinated, but revaccinated. Hear him: "Revaccination originated in France. Every young soldier is revaccinated on his entrance to a regiment. Our army knows of no exceptions." Dr. H. Oidtmann, staff surgeon, and chief physician to the beleagured Verdun and St. Quentin, Paris, hospitals during that siege, puts it thus: "Shortly before the outbreak of the war the whole of the French army were revaccinated (and the French vaccinate till it 'takes.') This general vaccination tended rather to extend the disease than to protect from it." If there were 23,469 deaths, there must have been 166,000 cases, taking the Paris civilian mortality as a criterion—and all revaccinated! Carrying the proper ratio on, all this would require an army of 1,600,000 men! In short, the statistic has been officially exploited and exploded before three governments, Swiss, German and English, and our book-makers and boards of health ought to know it by this time.

In a somewhat extended and careful study of both sides of the perplexing question of vaccination I have learned that the unveracity of much of the *pro* side of it is appalling, and no term expresses the condition so well as vaccinal verophobia. It pervades all the literature so extensively that every statement in this field by a health officer, or otherwise pecuniarily interested person must be scrutinized with the greatest care before it can be accepted as fact. Nor do I attribute this condition of affairs to dishonesty, but to carelessness and to a disposition to accept a statement as truth rather than by laborious research prove it true or false.

Indianapolis, Ind. W. B. CLARKE, M. D.

VIGOROUS ACTION AGAINST SUBSTITUTORS.

Fairchild Bros. & Foster have recently adopted vigorous methods for dealing with those druggists who substitute other preparations when Fairchild's are ordered, as will be seen by the following letter:

COPY.

Dear Sir: We beg to call your attention to the following statement of facts, which we believe will be of great interest to you as a practising physician, relying upon the pharmacist for dispensing the medicines which you prescribe:

On a recent date, a prescription of a ——— physician, ordering "essence of pepsine, Fairchild's," was sent to ——— drug store. The bottle dispensed upon this prescription was immediately sealed in the presence of a witness and expressed to us. A copy of the prescription was asked for and obtained, which proved to be an accurrate transcript of the prescription, bearing date and number corresponding to those upon the label of the bottle dispensed. Upon examination, the contents of said bottle was found to be a fluid differing materially from Fairchild's essence of pepsine, so as to be obviously recognizable as a plain violation of the physician's prescription.

Another written order for Fairchild's essence of pepsine was sent to Druggist ———. Upon examination, this proved likewise to have been filled with a different and inferior fluid.

Subsequently, the same day, a messenger was sent to ———, and asked verbally for four ounces of Fairchild's essence of pepsine. He received a wrapped vial, for which he paid 50 cents. This bottle was found without label, and the messenger returned and asked to have the bottle labeled. The druggist then simply labeled it "essence of pepsine." Thereupon, the messenger requested the druggist to put "all the name on the bottle." The druggist told the messenger that he "would not dare to put Fairchild's name on the label, although it was all the same." The druggist finally admitted to the messenger that he was "out of Fairchild's essence," and then returned the 50 cents.

There is one significant fact that should also be mentioned; the price charged in these cases (as in every instance coming to our knowledge) is the same as the patient would be charged by pharmacists who dispense genuine medicine ordered. Comment is unnecessary.

In defence of our own rights, and in order that you may take such means as you deem best to protect yourself and your patients, we advise you of these facts. We further respectfully request that in prescribing Fairchild's essence of pepsine you will kindly send the prescription to pharmacists, of whom there are many, who will faithfully respect their legal and professional obligations to physicians and to the public.

These prescriptions, sealed and certified, are in our possession, and we stand ready to still further substantiate these statements. Very respectfully yours,

[Signed] FAIRCHILD BROS. & FOSTER.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

MEDICAL SOCIETY OF THE HOSPITALS.

Recurrent Scarlatina.—M. Comby: Recurrencies of eruptive fevers are rare; hence all carefully observed facts should be recorded. Of two cases of recurrent scarlatina, the first occurred under the service of M. Palier, an experienced hospital interne, in a girl four years old, who, fifteen days previously, presented all the symptoms of normal scarlatina. There was complete desquamation, when suddenly the fever was renewed, and a fresh scarlatiniform eruption appeared upon the body and limbs. The patient was cured after having presented symptoms of prostration, a typhoid condition, hyperthermia and diarrhœa.

The second case was observed at the Hospital Trousseau in a young girl of six years, entered in the special pavilion for normal scarlatina; had high fever and general eruption for one week, on the fourteenth day, when the fever had subsided, and general desquamation had taken place, a new eruption, like the first, appeared with return of fever. The recurrence lasted six days, and was followed by double otitis. Examples of recurrent scarlatina are recorded by Henoch, Barthez, Rilliet and Senné. M. Perigord, of Limoges, published very recently in the *Limousin Medical* an observation on doubly-recurrent scarlatina in a girl of four years, the third eruption lasting a month. How to explain these eruptions? In the isolated pavilions, in which the patients are numerous, a reinfection might be suspected. But recurrences occur in families where the children are isolated, without there being other cases in the house or neighborhood, so this explanation is not admissible. It is then probable that the recurrence is explicable by the same pathogenetic cause as that of typhoid fever, viz.: by a germ that has not yet expended its virulence, and it is not a new disease that has declared itself.

M. Rendu recently observed a similar case, but his conclusions were different. The case was a child with normal scarlatina. On the subsidence of the fever and during desquamation a white angina occurred, with recurrence of fever, and a new scarlet eruption. He could not conclude that it was a recurrence of scarlatina, but a secondary infection by the streptococcus. Secondary infections are now recognized, and M. Lemoine has again called attention to them.

M. Le Gendre observed a case which did not admit of this explanation. It was manifestly recurrent scarlatina. After the first normal attack, a red angina and a new scarlatina occurred, which was identical with the first.

M. Roger: The history of the recurrences of scarlatina presents a very difficult nosographic problem, because we do not know the pathogenic agent, and can only conjecture as to the nature of the accidents. Since January 1, 1896, of ninety patients observed there were ten secondary eruptions. In three cases the eruption consisted of lichenoid or papular erythema, which could not be considered as a recurrence. In five other cases multiform eruptions at the beginning clearly presented, on the second day, the appearance of an eruption of scarlatina.

Finally, two cases, after a grave attack of the disease, had eruptions indentical in every respect with those of scarlatina. In one case there was a slight exanthema of the throat, and three days after its disappearance there supervened a third, much less extensive, but accompanied with serious general phenomena. We see, then, a series of facts establishing transitions between the different varieties of erythema, the most important of which simulates unmistakably the recurrence of scarlatina. M. Béclére agreed with MM. Rendu and Roger as to post-infection and not recurrence. Most generally the so-called recurrences follow severe attacks, complicated with otites, suppurations, and other streptococcic manifestations. It is then but natural to ascribe these eruptions to a toxine infection of streptococcic origin.

M. Du Cazal reported a case of cerebro-spinal syphilis four months after the appearance of chancre.

SURGICAL SOCIETY.

Fibroma of the Ear.—M. Picque presented a report sent to the Society by M. Andain, of Hayti. The fibromata of traumatic origin are located on the lobule of the ear. M. Andain reported the case of a negro in whom the fibromata appeared in consequence of a cut from a whip, and another of a negress, in whom it was caused by a blow from a stick. Sometimes they are recurrent, and he has had to repeat the operation for their removal. M. Rontier thought that the term cheloid of the ear would be more appropriate. M. Delorme asked if the tumors were painful. In cases of painful cheloids, compression should be used. M. Michaux had seen two large cheloids of the ear, which were intimately connected with the skin; repeated applications of the actual cautery are preferable to removal. M. Riclus had published a case of cheloid of the neck from a burn, in which compression produced the best results. M. Kirmisson: The facts given in the report by M. Picque have long been known. The negro race is especially subject to fibroma of the external ear; it should not be confounded with cheloid. There are subcutaneous fibromata not connected intimately with the skin like cheloids. M. Lucas Championniere: M. Andain's description applies perfectly to cheloid. As to the possibility of dissecting the skin from the tumor, it is not necessary to do that in order to affirm that we have to do with a cheloid or not. Recurrences are frequent, and the tendency to the development of cheloid appears to diminish as the child advances in age. M. Poirier operated in only one case, which followed piercing the lobule of the ear.

Anchylosis of the Knee and Cuneiform Resection.—M. Picque reported a case of M. Binaud, of Bordeaux, in which the patient was cured of a sub-acute rheumatism that was followed by a flexed knee and a posterior subluxation of the tibia. A cuneiform resection was made, and the two rotular fragments were sutured by silver wire. No drainage, results slight, cure rapid. M. Delorme: Blennorrheal arthritis cured by fibrous anchylosis. Mobility, cure.

THERAPEUTIC SOCIETY.

Pembotano.—M. Pouchet has experimented with pembotano in cases of paludism that had resisted quinine and the arseniate of soda. He made a chemical study of the roots of pembotano, and discovered three active principles whose action was comparable to that of quinine; he proposes to continue his investigations, which are as yet incomplete.

Pharmaceutical Poisoning.—M. Crèquy recalled the accidents occurring under varius circumstances, and demanded that pharmacists should copy the formula of the medicines or medicines used upon the label of the bottle. M. Crinon thought it would be dangerous to copy the names of the substances. The only useful plan would be to copy the mode of administration. M. Berlioz was of the opinion that it was for the physician to request the pharmacists in certain cases to reproduce the formula. M. Catillo : The plan proposed by M. Crequy is adopted in Germany.

Accidents Due to the Impure Tincture of Iodine.—M. Blondel called attention to the pain and the peritoneal phenomena produced by intra-uterine injections of the tincture of iodine that contained methylic alcohol. M. Courtade replied that these accidents are frequent, and are due to iodohydric acid, produced by the tincture of iodine containing methylic alcohol. M. Ferrand emphasized the varieties of action of the tincture of iodine—not only its varieties, but its idiosyncrasies. Certain skins, and not the finest and most delicate, are very much affected by iodine. M. Crinon said that at the end of a month the purest iodine will contain iodohydric acid. It should always be recent when used. M. Pouchet proposed a useful method for recognizing the presence of a large quantity of iodohydric acid. In any notable quantity it will prevent the iodine from precipitating in water. M. Vigier prepares a tincture of iodine that will not change. True, that the preparation is not an economical one, but it consists in using alcohol at 96 degrees instead of at 90 degrees, as the Codex prescribes. Hydration of the tincture is thus lessened, and the iodohydric acid that results is slower in forming.

Treatment of Alcoholism and Dipsomania by the Sulphate of Strychnine.—According to M. Bauzau, progressive subcutaneous injections of the sulphate of strychnine, dose, 6 millegrammes daily, will arrest acute and chronic alcoholic manifestations. In case other recognized forms of treatment are insufficient, they will give excellent results. They ameliorate dipsomania, but the treatment should be continued in pill form.

Treatment of Cataract in Diabetics with Anti Strepto coccic Serum.—M. Boucheron: A diabetic patient of sixty years, and affected with cataract, became subject to a streptococcic disease—a lymphangitis of the leg and foot. He received an injection of the serum, and taking advantage of the period when by the injection the disease had been much relieved, extraction was practised. The wound healed by the first intention without the least congestion, and the result was definite and complete. The serum used was that of Marmorek, and this case proved that it can be used in diabetics that are streptococcic, and that the extraction of cataract can be successfully accomplished after the preventive action of the serum, in spite of the existence of glycosuria and streptococcia.

FRENCH SOCIETY OF LARYNGOLOGY, OTOLOGY, AND RHINOLOGY.

Epileptiform Convulsions from Hypertrophy of the Tonsils.—M. Boulay, of Paris: Among the numerous nervous troubles that may accompany the different affections of the nasal fossæ and pharynx, especially hypertrophy of the tonsils, convulsive phenomena may be, though rarely, enumerated. The following case is a typical example of epileptiform convulsions associated with enlarged tonsils. The tonsils of a child were enormously enlarged, with adenoid vegetations; a boy of twelve years; and since he was two years old was subject to nocturnal nervous attacks, with dyspnœa that threatened asphyxia. The tonsils were removed, and he had no further attacks; the vegetations also were ultimately dispersed. This was probably not true epilepsy, but the convulsive seizures were analogous to the epileptiform phenomena that are caused by foreign bodies in the ear and certain lesions of the nasal fossæ.

Acute Catarrhal Otitis of Middle Ear and Microbes.—M. Lannois: The result of my investigations of animals is that the normal middle ear is an aseptic cavity and contains no micro-organisms. The fluid of catarrhal middle otitis does, or does not contain microbes, accordingly as we examine it at a period recent or not after the attack. The disappearance of microbes, when the effusion dates from a certain time, is probably due to the bactericidal power of the mucous membrane and the fluid it secretes.

Oxygenated Water in Oto-Rhinology, its Hemostatic Action.—M. Gellè: Water oxygenated at 12 vol. has an energetic vaso-constrictive power, and consequently produces rapid hemostasis. It may, without danger, be introduced into the middle ear. Its antiseptic and hemostatic influences make it very valuable in oto-rhinology, in hemorrhages after the removal of vegetations, in epistaxis, which is easily arrested by its introduction into the nostrils by a tampon soaked in it. Excellent for cleansing the external auditory canal, it also offers another great advantage of being painless and of making bloodless the surgery of the ear.

GERMAN SURGICAL SOCIETY—CONGRESS OF BERLIN.

Bactericidal Action of Certain Salts of Silver.—M. Crédé, of Dresden: The bactericidal action of metals in the pure state has been often demonstrated. In the first rank comes thallium, then silver, cadmium and copper, etc. Microbes secrete lactic acid, which attacks the metal, and the lactate so produced acts in its turn, the salts of thallium being a very energetic poison. I have experimented with the lactate of silver, then the carbonate, which is less toxic. This last salt, which I have employed for many months, has yielded excellent results in the treatment of wounds. In five cases of erysipelas the lactate of silver has been employed with much success.

Bacteriotherapy of Malignant Tumors.—M. Peterson, of Heidelberg: From a series of experiments made at the clinic of M. Czerny with sterilized and filtured cultures of the streptococus pyogenes. the streptococcus prodigiosus pure and associated, and with the serum of animals inoculated with these cultures, it was concluded that the action of filtered cultures is less energetic than that of sterilized, and that of serum, still less—four times. In ten cases of cancer, the therapeutic effect of the different treatments was not appreciable. Only one case out of seventeen of sarcoma, was sufficiently modified to permit surgical intervention. M. Rosenberger, of Wurtzbourg: The serum has given results only in cases of sarcoma.

Origin of Articular Foreign Bodies.—M. Barth, of Marbourg: I have studied twenty-one cases of articular solids in order to determine their origin. They seem to proceed from two causes, traumatism and deforming arthritis, and never from dissecting osteochondritis.

Treatment of Fractures of the Radius.—M. Braatz, of Koenigsburg: I propose to replace the splints usually employed, and which have the inconvenience of supporting only one side of the wounded extremity, by a splint made for each special case, by means of a solid tissue and plaster, fixing the two sides of the forearm, to be left in place for three weeks, and followed by massage and exercise.

M. Storp, of Koenigsburg: I employ splints only when the normal position of the fragments cannot be maintained otherwise. After making the reduction I envelop the wrist in a large bandage of diachylon, and suspend the limb in a narrow bandage, taking care to make the upper part of the fracture the point of support. At the end of ten days, I remove the bandage and begin with massage.

A Method Destined to Supersede the Cæsarian Operation.—M. Duhrssen, of Berlin, proposed to replace the Cæsarian operation in cases of atresia or retraction of the neck, by the following operation, which has been successfully employed: Make a long incision, antero-posteriorly upon the cervix, remove the bladder and peritoneum from the cul-de-sac of Douglas, afterwards open completely the cervix and lower segment of the uterus, pass the hand and extract the fœtus.

Otorrhœa.—The ordinary discharge from the ear is a chronic suppuration of the middle ear, escaping from a perforation of the tympanum. The relations of the petrous bone, of which the middle ear forms a part, with important organs, often cause serious disease, with the complication of facial paralysis, cerebral troubles, and especially meningitis. The passage of a suppurative otitis into a chronic form is due either to a general unhealthy condition—tuberculous, syphilitic—which should always be looked to in an old otorrhœa; or to secondary infections from the pharynx, Eustachian tube, etc. Otitis of the middle ear is very often accompanied by mastoiditis, which may continue latent for a long time and keep up the discharge. As respects treatment, consider first the general health, always with reference to syphilis. To prevent retention of pus, make insufflations of air by the Politzer process, and injections of warm water; drop in some antiseptic fluid, viz., phenic glycerine, phenosalyl, etc. Dress the tube with iodoform gauze; for the vegetations use boric alcohol, or touch with perchloride of iron. If these are insufficient, curette the vegetations, extract the carious ossicles, or finally make a large opening by Stacke's process, combined or not with opening of the mastoid centrum.

Organotherapy and Serotherapy for Troubles Resulting from Ablation of Annexæ and Hysterectomy.—Dr. Picherin signalizes cases that present congestions of the side of the face, swellings, cerebral disorders, etc., following castration. In one of them he administered subcutaneous injections of the liquor of Brown-Sequard, and soon observed marked amelioration. Two other cases were treated with injections of artificial serum; the immediate results were remarkable.

MM. Mainger and Mond, of Kiel, report similar cases, that were ameliorated by injections of the crude ovarian substance of the cow. The fluid extract of ovarian substance was found to be inferior to testicular juice.

Sterility Not Always Imputable to Woman.—This proposition, which has been forcibly defended in France by Prof. Pajot, has just received new confirmation by Dr. Vedder, of Christiana, who carefully examined 300 married women and their husbands that were childless. He proved in effect that in 70 per cent. of the cases sterility was due to the man, either directly in consequence of functional impotence or the absence of spermatozoa, or indirectly from the infection of the woman by gonococci. In 30 per cent. of the cases the cause was due to the woman, and most generally owing to the presence of neoplasms or atrophy of the uterus (*Norsk Magazin for Loegevidenskaben*).

Pruritus Vulvas.—The causes of this affection are often obscure, and the treatment proposed is generally unsatisfactory, as is demonstrated by the innumerable remedies contained in books of pathology, and which often serve to aggravate the malady. There are many cases in which the pruritus seems to be an individual affection, and not complicated with diabetes, or any uterine or renal trouble, and these cases are the most obstinate. The vulva is then generally dry, and remedies should be applied in the form of pomades and not in solution. In those that are entirely rebellious, one is authorized to practise the operation of Schrader and Küstner, which consists in excising the diseased parts of the mucous membrane. The operation of excising the whole mucous membrane of the vulva, with the clitoris and the labia minora, has been successfully performed.

Spontaneous Fractures.—M. Dumis, of Berlin, has observed thirteen cases of spontaneous fracture, which were cured with a slight retraction of the limb. As respects their etiology, the cause, in his opinion, is always due either to a tuberculous or syphilitic condition.

Nitro-Glycerine in Hepatic Colic.—M. Turnbull proved the therapeutic action of nitro-glycerine in hepatic colic in a woman of forty-eight years. The attacks were very violent, but soon disappeared after the administration of 1 to 2 capsules of nitro-glycerine, each containing 0 gr. .0005 of the drug. It acts by paralyzing the involuntary muscles.

Phosphorus in the Chronic Cephalalgia of Children.—Dr. Hartcop, of Barmen, in the cases of persistent cephalalgia of anæmic and nervous children, administers phosphorus dissolved in cod liver oil during winter, and in emulsion in summer. The dose, from one to five years, is 5 decimilligrammes, and from five to twelve years, 6 decimilligrammes, twice a day, one hour after eating. Suspend it if gastric troubles should supervene. In case of diarrhœa, add 5 centigrammes of the tincture of opium; duration of treatment varies from six months to a year.

Anchylosis of the Knee Following Blennorrhagic Arthritis.—M. Delorme: I present a patient whom I have happily succeeded in curing of anchylosis of the knee. After an acute attack of blennorrhagic arthritis, the knee became motionless and anchylosed. Being satisfied that the extensor muscles were in good condition, I under took to mobilize the articulation. My first attempt showed me from the cracking sounds that were heard that it was a case of fibrous anchylosis, so I persevered, and at the end of four months, and after fifteen efforts, the satisfactory result which you see was obtained.

M. Kirmisson: These cases are as interesting as they are rare; we know the tendency of blennorrhagic arthritis to anchylosis. For my part, I saw a case in which the more I tried to mobilize the joint the more consolidated the anchylosis became.

M. Michaux: Since surgeons have adopted early arthrotomy as a rule, anchyloses have become much more rare.

Pulmonary Tuberculosis and Endocarditis.—The autopsy of a patient in the hospital service of Prof. Potain revealed an enormous cavern, and at the same time the presence of a cardiac lesion involving the mitral orifice, which was slightly contracted by numerous adhesions. This is an example of the contradiction of the classic affirmation of the "antagonism between affections of the heart and pulmonary tuberculosis" In the majority of cases, tuberculosis associated with endocarditis is nearly always of slow progress. As respects the relations existing between tuberculosis and endocarditis, three conditions should be distinguished, first, real tubercular endocarditis; second, ulterior endocarditis, the result of secondary infection; third, sclerous endocarditis, which appears to be the effect of the influence exercised by the tuberculosis upon the myocardia, as upon other organs. The diseases of the heart which produce ischæmia of the organs favor the development of tuberculosis, and those which produce hyperæmia are opposed to its evolution. Tuberculosis, then, would seem to be stimulated in patients with mitral retraction.

Treatment of Purulent Ophthalmia.—Dr. Galezowski: Every day new topical applications are proposed for the cure of purulent ophthalmia, the permanganate of potash for example, and I persistently oppose this excess of zeal of opthalmologists. We possess in the treatment by the nitrate of silver a sure means that has not failed for twenty years, in the ophthalmia of infants, when employed in the fortieth solution or pencil cauterizations, followed by an application of salt water to saturate the excess of the nitrate. The preventive treatment with citron juice or with a weak solution of the nitrate, that certain physicians and midwives employ immediately after birth, is useless and dangerous, because they are not sufficient to kill the microbes of ophthalmia if they already exist upon the conjunctiva, and have produced the conjunctivitis of which they are capable.

Forcible Delivery in Eclampsia.—M. Charpentier read a report of an observation of M. Robert, of Pau. In a case of eclamptic albuminuria, and at the seventh month of pregnancy, forcible delivery by progressive manual dilatation, and under chloroform, was practised. It was only by several incisions around the periphery of the uterine neck that the hand of the operator could be introduced. While this practice was followed by success, the reporter did not think it should be generally employed. Why not have attempted to arrest the attacks by the use of chloral or chloroform, or of venesection? In eclampsia supervening at an early period of pregnancy, and if the attacks are not of long duration, these means are often sufficient. Generally speaking, it is not necessary to interfere by forcible delivery in eclampsia unless death is imminent. The observation of M. Robert was followed by a pathogenic theory, according to which there was the presence of pus, which would have caused the eclampsic attacks, but which the reporter thought was unfounded.

Romberg's Sign in Tabetic Amaurosis.—M. I. B. Charcot: A patient, tabetic for twelve years, and presenting besides the typical lesion of tabetic amaurosis, suffered violent pains, and had the sign of Westphal, but without the least motor inco-ordination. Suddenly he presented Romberg's symptom, rendered permanent by amaurosis. This pathological phenomenon diminished in a month by the treatment by suspension.

Functions of the Supra-Renal Capsules.—M. Charrin presented a paper by M. Petit, which considered the question of the role played by the capsules in fevers. Under the influence of certain toxines, particularly the microbic secretions, the cells of the acini become granular and swollen, and show considerable activity. From this fact one is authorized in placing the capsules among the group of important viscera in physiological pathology.

SOCIETY OF MEDICINE OF ROUEN.

Results of Symphyseotomy.—Dr. Martin presented two cases of symphyseotomy, one of which had been operated upon three months previously and the other sixteen months. Both were cured, and they experience no suffering from walking or running, or executing any kind of movement. The vesical sphincter is not injured; the pubis, slightly movable, causes no functional trouble. Dr. Martin then reported the first symphyseotomy that had occurred at Rouen, in which, despite the mobility of the pubis, and a slight incontinence during quick walking, the patient is not obliged to keep her bed. She can walk and attend to her duties without experiencing pain. It is unjust, without proof and in a general way, to affirm that symphyseotomy disables women; on the contrary, it is but just to declare that it has already saved many children.

SOCIETY OF INTERNAL MEDICINE OF BERLIN.

Pathogenesis of Icterus.—M. Reuvers made contributions to the pathogenesis of icterus. Hematogenic icterus, the production of icterus from the blood, is not admitted; hepatogenic icterus alone exists, because it is only in the liver that the biliary pigment is formed. Acute catarrhal icterus, which it is admitted is produced by the obstruction of the choledochus by a mucous plug, in consequence of catarrh of the duodenum, should be divided into two clinical groups, the apyretic and the fertile. Apyretic icterus attacks vigorous individuals in full health, the urine becomes icterous, the stools are discolored, anæmia is pronounced and persistent. According to the author, the etiology by biliary stasis does not often exist, but nearly always proceeds from an icieric poison due to an invasion of bacteria and their toxines. Febrile icterus belongs to the chapter of gastro-duodenal catarrah with icterus, and the infectious nature of this icterus is demonstrated by Renvers, who found in the bile bacteria of different sorts. Chronic icterus is produced by an obstacle to the elimination of the bile, which causes its reabsorption in the biliary canals, and is due to calculi, cirrhosis of the liver, abscess and echinococci; icterus is rarely produced by stasis, but it habitually comes from an inflammatory icterus provoked by calculous irritation. The gall bladder is very often increased in volume in cases where the calculi are retained in the choledochus. It is also augmented in cases of acute inflammation complicated with icterus. When the inflammation is provoked by calculi it often results in the penetration of germs into the vesicle, and to the increase of the volume of the vesicle are joined the phenomena of pyemia.

Voluminous Primitive Cancer of the Right Ovary, with Ascites, in a Young Girl of Seventeen Years.—Primitive cancer of the ovary is rare; it comprehends two principal varieties, the diffuse and medullary, the superficial and papillary. According to M. Pozzi two opinions prevail respecting the treatment, one by Schroeder and others, that it is better to abstain, by reason of the inherent dangers of the operation, and the slight chance of cure; on the other hand, Spencer Wells, Ruge, Cohn, Martin, Pozzi, etc., advise the operation whenever the extirpation of the tumor is possible; because, in the first place, of the instantaneous relief of the patient, and also because a cure, at least temporary, can be obtained. The young girl who was the subject of the above disease had a large primitive cancer of the right ovary with ascites; laparotomy was performed, and a tumor, weighing 3 kil. 700 was removed. One year after the operation she was in a satisfactory condition of health, slightly pale but increased in weight, with renewed strength, so that she could resume her occupation as seamstress. Her appetite excellent, and no appearance of relapse.

Hydarthrosis and its Treatment.—Hydarthrosis is a chronic serous effusion consecutive upon irritation of an articular serous membrane. Its presence is revealed by the disappearance of the peri-articular hollows and the appearance of small projections due to the forcing out of the soft parts by the effused fluid. It is very often accompanied with muscular atrophy, especially when the affection has lasted some time. Its nosological diagnosis is simple, but the etiological is important, for it suggests the prognosis and the rational treatment, as also if the cause be local or general. The local causes embrace wounds, torsion, fracture, chronic diseases of the articulation, dry arthritis with foreign bodies, tabes, osseous affections, phlebitis. Certain general diseases, such as syphilis, tuberculosis, rheumatism and blennorrhagia, very frequently determine hydarthrosis. Idiopathic hydarthrosis should be erased from the nosological record. The treatment varies with the cause and with the period of the appearance of the effusion. Commence by mild measures, perfect rest, counter-irritation, compression and massage. If all these measures fail of success, employ puncture, followed by an irritant injection—phenic water, 5 per cent. In cases that resist absolutely, have recourse to arthrotomy. General treatment should not be forgotten; massage will cause the muscular atrophy to disappear.

Treatment of Pleurisy by Massage.—M. Kemper has applied the method of Prof. Murray, of Stockholm, for the treatment of pleurisy. It consists in movements of the thoracic walls, combined with massage, and passive movements of other parts of the body. The following is his process. The patient lies in his bed, upon his healthy side, with the head slightly elevated and resting upon a hard pillow, limbs flexed, arm of the affected side turned upward and backward. In this position the movements of expansion during inspiration and also of expiration of the healthy side are restricted, while the diseased side is in the most favorable position for free respiratory movements. The patient is then directed to close the mouth and make from sixteen to twenty deep respirations per minute, during which the physician applies massage to the intercostal muscles in order to force the movements of inspiration into the compressed pulmonary lobes as much as possible. At the moment of inspiration that part of the thorax where the effusion is must be pressed by the palm of the hand. The thickness of the liquid effusion diminishes, it is forced upwards and comes in contact with the healthy part of the pleura, which has retained its power of absorption. In order to act more directly upon the effusion a series of rapid movements, gentle and vibratory, is executed by the forearm on the thoracic wall over the diseased part. In this way M. Kemper has successfully treated eighteen pleuritics with effusion, and two dry pleurisies. In two cases only was there no amelioration, and in one there was an aggravation. In recent pleurisy massage is contra-indicated, but even then gentle movements and slight oscillation produce good results.

J. A. C.

INTRALIGAMENTOUS CYST—PELVIC PERITONITIS—OPERATION—RECOVERY.

By Louis Frank, M. D., Louisville, Ky.,

Associate Professor of Obstretrics and Director in the Bacteriological Laboratory in the Kentucky School of Medicine, etc., Louisville, Ky.

The following case may be of interest on account of a few peculiarities. About ten days ago I was asked by Dr. H. E. Tuley to see a case with him for some pelvic trouble. I made an examination and found a tumor, the exact character of which I did not make out perfectly, upon one side of the abdomen. On the other side I detected some induration. The history of the case was one typical of tubal inflammatory disease, the patient being a woman eighteen years of age, married, with the history of pelvic trouble extending over a period of about two years. Diagnosis of pyosalpinx was made, and an operation was advised and carried out a few days later. At the operation a tumor was found on the right side, which had been detected by bimanual examination, extending to the uterus and to the walls of the pelvis on the outer side. After a careful examination it was discovered that the tumor was not a pyosalpinx, nor inflammatory trouble of any nature, but it was an intraligamentous cyst. There were a great many adhesions between the bladder, between the omentum, intestines and mesentery, low down upon the left side, also upon the right side, where this tumor was present, and over the surface of the tumor itself. The adhesions were carefully separated before I attempted to remove the tumor. The cyst was about the size of an orange, probably 2½ to 3 inches in diameter. After aspiration, which was done with a large aspirator needle, the fluid was drawn off, the capsule was incised and the cyst enucleated. The cavity was then packed with gauze. The patient has done uninterruptedly well since the operation, the highest temperature being 100 1-5° F.

The points of interest about the case are the patient's age and the immense number of adhesions present. I believe the adhesions were due to a pyosalpinx which had existed upon the left side. The tube and ovary upon the left side were matted in adhesions, and when these adhesions were separated it was found impossible to obtain sufficient pedicle to be ligated; they merely existed as a small mass lying close to the uterus itself and were not ligated and removed. The tube upon the side where the cyst was present extended over the cyst itself.

Another peculiar feature of the case was that the ovaries had been completely destroyed, which we find rather unusual in cysts of such small size. No pedicle was present, and we were compelled to enucleate the cyst completely and entirely from the folds of the broad ligament. With a cyst of this size, even when intraligamentous, or beginning in the paroöphoritic region, we are usually able to obtain a pedicle, and we do not find the ovary is destroyed as early as in this case. This tumor presented all the characteristics of a paroöphoritic cyst, and there were papillomatous masses upon its inner surface. It extended deeply into the broad ligament, separating the broad ligament completely, and extended out to the bony wall of the pelvis. There had been no extension above the line or plane of the pelvis.

Dr. W. H. Wathen: Intraligamentous cysts that are supposed to arise in the hilum of the ovary are necessarily embedded in the folds of the broad ligament at their beginning, and remain so. In other words, they have no pedicle at any time and keep burrowing in all directions. Where there is an intraligamentous cyst which is not too large, and where both sides of the adnexa of the uterus are destroyed, the operation by vaginal hysterectomy is decidedly preferable to any other method, because the dangers are less, convalescence is more rapid, and the woman has no wound on the abdomen to annoy her or to cause ventral hernia. These cysts can be removed nicely by vaginal hysterectomy, and any one who has had no experience in removing them per vaginam, having confined himself to laparotomy for such conditions, will be surprised to see how easily they may be removed. I have operated several times per vaginam for removal of such cysts. In one instance the cyst had suppurated and extended up nearly to the umbilicus; there was also a pyosalpinx upon the opposite side, which had extended up about the same distance. These cases usually do well, sitting up in six or eight days, and generally have no trouble.

I was pleased to hear Dr. Frank say that the extensive adhesions were separated without injury to any viscus, because many operators argue against vaginal hysterectomy in cases of this character, or any abscess in the pelvis, and assert that it is impossible to separate the adhesions completely, and that very imperfect work is done. I have contended that adhesions can be separated per vaginam, and we are sometimes surprised at the ease with which it can be done.

Dr. A. M. Cartledge: Four weeks ago I was called to see a woman in consultation. She was sixty-three years of age, and gave the history that she had been suffering six or eight weeks with uterine hemorrhage, and diagnosis of carcinoma uteri was made by the attending physician. The doctor also said there was another interesting feature about the case, *i. e.*, that the old lady had a pelvic tumor, about the size of a fœtal head, which had existed since she was thirty-five years old. She had consulted a number of physicians from time to time, who had all advised her not to have the tumor removed. An examination seemed to demonstrate that the tumor was connected with the uterus. The tumor was fixed in the pelvis, and the evidences were such that made the diagnosis of uterine carcinoma very questionable, and I concluded that it was an old myomatous tumor of the uterus, from the history that it had existed for thirty years or more. She also gave the history of such menstrual derangements in earlier life as would indicate fibroid disease of the uterus. The important question was the best method to be employed in removal of the tumor. Its condition was so fixed that I did not care to attack it from below. If the tumor was a fibroid I thought it was too large to be removed per vaginam. I therefore made an abdominal incision; adhesions were found very extensive, it being a very old cyst; it was raised up out of the dense mass of adhesions, and while being delivered the cyst ruptured, discharging one and one-half pints of fluid. It is a notable fact that intraligamentous cysts rarely attain a large size. In this case the cyst was fully as large as a fœtal head, and had not increased in size for about thirty years. The case presented a very serious aspect from a surgical standpoint. The adhesions were terrific, and the rupture of the cyst also complicated matters. I decided that the best thing to do was to combine the methods of abdominal and vaginal hysterectomy, going in from below and clamping with forceps as best I could; doing a complete operation. This plan was followed and the patient did uninterruptedly well, leaving for home on the sixteenth day after the operation.

Dr. W. C. Dugan: Lanphear, of St. Louis, was the first to combine the two methods of abdominal and vaginal hysterectomy. If Dr. Frank had employed this method in operating upon the case he has reported, clamping from below as Dr. Cartledge has mentioned, he would have simplified matters very much and would have been able to remove the uterus at the same time.

Dr. Louis Frank: Like Dr. Wathen, I believe where we contemplate doing an hysterectomy in addition to our operation upon the adnexa, if we can demonstrate that there are not extensive adhesions, it is far better to perform a vaginal hysterectomy. Enucleation is much more easy, and after removal of the cyst we have a free outlet for drainage. However, where there are extensive adhesions, such as were encountered in the case reported, and where we hope to save the appendage on either side, I believe operation from above is the better plan. With the adhesions encountered in this case, it would have been impossible to deal with them from below, and these adhesions were undoubtedly the cause of the intense pain with which the woman suffered. The pain was not due to pressure from the cyst itself, but due to the adhesions which had occurred, probably from inflammatory trouble upon the opposite side, which had set up a pelvic peritonitis. The adhesions were very extensive, and were between the broad ligaments upon both sides, between the viscera and the intestines themselves, and could not have been separated from below. The cyst was pulled out of the pelvis, and was not intimately connected with any of the viscera, so there was no trouble in enucleating the cyst itself.

As to the question of intraligamentous cysts having a pedicle: When these cysts are of small size, and where they arise in the broad ligaments, unless they burrow deeply, we may often be able to obtain a pedicle. We should differentiate between true intraligamentous cysts and cysts which arise from the parovarium. In those cysts which arise in the parovarium it is always possible to obtain a pedicle, unless they have burrowed deeply and have reached an enormous size. J. Bland Sutton, in his latest work, dwells at length upon these points. This was a true intraligamentous cyst, as shown by the presence of papillomatous masses within the cyst proper, and it is certain that the case could not have been as well operated upon from below.

(This patient has, since the above report, fully recovered) L. F.

AMPUTATION OF BREAST FOR MULTIPLE ABSCESS.*

By W. C. Dugan, M. D., Louisville, Ky.

The specimen which I present is a breast which I removed for chronic multiple abscess, and it proved to be nothing more or less than that. I merely present it to call attention to a few points. Here was a woman who had multiple abscesses several years ago which destroyed her breast; at this time she was sick for more than one year, and a few months ago the trouble returned. Her breast was destroyed, it was hard and presented a number of masses or nodules; you will notice the nipple is depressed, which makes it look very much like a malignant growth, but from the history I was satisfied it was not malignant, or if so, the malignancy was secondary to the abscess. I decided to remove the breast, because if left the abscess could probably not have been cured, and besides this the breast was functionally useless and would most likely take on malignancy afterwards, so I considered it conservative surgery to remove it. I did not know at the time that there was pus in it. The abscess was very deep, right against the peritoneal covering of the muscle.

The points that I desire to emphasize are that I performed the operation for chronic multiple abscess of the breast, which had rendered the gland functionally useless in a patient much run down in health, and in view of the fact that these breasts are so apt to take on malignancy later.

Dr. W. H. Wathen: Last October Dr. Dugan assisted me in removing a breast which we pronounced sarcomatous. The day after the operation I cut through the tumor and found a large abscess containing an ounce of pus, so I came to the conclusion that Dr. Dugan and myself had made a mistake in our diagnosis and we had simply removed a breast for abscess; but a specimen was taken to the laboratory, a section was made and carefully examined, and pronounced unmistakably sarcomatous, suppuration having occurred in the substance of a malignant growth.

Dr. F. W. Samuel: It has been demonstrated that chronic mastitis may often be mistaken for malignancy, on account of contraction of the nipple which frequently occurs. I merelv wish to commend the operation performed by Dr. Dugan, and he has probably saved the woman from malignant disease.

Dr. A. M. Vance: I have operated upon one case similar to the one reported by Dr. Dugan, and for the same reason he has stated.

Dr. J. W. Irwin: I am tired hearing of the surgeon cutting out the breasts of women for everything. I attended a woman in her fifth confinement. After the four previous confinements each time she had had an abscess of the breast, until it was fissured and furrowed out with cicatrices in every direction. After the fifth confinement she had no abscess and she had milk in the breast. It seems that some of its milk ducts were still intact. It developed into a fairly good breast and she gave milk from it. I think when we see abscesses of the breast that we should treat them just as we do abscesses elsewhere about the body, unless there are other evidences than chronic suppurative mastitis. We should let such breasts remain. Operators seem inclined to go to extremes.

Dr. A. M. Cartledge: I think the operation as performed by Dr. Dugan is a step in advance, but we should throw a certain restriction around the operation, just as he has done. I would rather hear a man say he would amputate an inflamed breast that was functionally destroyed than to hear him say the operation was done partly because he thought it would become malignant. I am afraid it would be establishing a precedent which would cause the sacrificing of a great many breasts that should not be sacrificed. However, there is a surgical principle to support Dr. Dugan in the operation performed. Where we have multiple abscess of the breast, the involvement is such that it is sometimes almost necessary to remove the breast in order to relieve the pathologic condition. If chronic multiple abscess has existed for six or eight weeks without improvement under less radical means, it is well in some cases to amputate the breast, otherwise we have the danger not only of malignant degeneration, but also of chronic sepsis, and the breast would probably have to be removed later. Amputation of the breast may also be advised where there is but one large abscess, for the same reason. Where the breast has been the subject of multiple abscess with numerous cicatrices, the function of the gland is usually destroyed, and might as well be sacrificed, owing to the dangers already indicated. Usually multiple abscesses of the breast are attended with sub-acute pyæmia.

Dr. W. C. Dugan: The question of removing the breast under conditions stated is a very serious one, and I hesitated for a long time in this case. I had the patient under observation four years ago. She had then been sick for a number of months with this abscess, and was treated by some of our best physicians. The condition was very much as Dr. Cartledge has described; she had multiple abscess. At that time we opened it thoroughly and scraped out the diseased tissue as well as possible, and we were fearful then that we would be forced to remove it, as her health was such as to cause greatest anxiety, and there was also chronic sepsis, as mentioned by Dr. Cartledge. When the operation was performed there was some question in my mind as to what the condition really was; at first I thought it might be malignant, as it possessed many of the symptoms of malignancy, retraction of the nipple, etc., and with the usual signs of inflammation about. On examination of the breast I remarked to the husband that without the history given me I should have pronounced it malignant, just from its condition. I treated her for perhaps a month, but there was no improvement, and another nodule was forming. She suggested one day that the breast be enucleated. I had already discussed the matter with some of my surgical friends, and told her I had been discussing the matter myself; also told her it was a question upon which physicians were not agreed by any means, but my own opinion was that enucleation was the best plan to pursue, insisting, however, that she get the opinion of another surgeon. She saw another surgeon, giving him the history the same as she had given me, and he gave it as his opinion that the breast should be removed by all means, and for the same reason I had mentioned. I would not take the responsibility of removing a breast for this condition without counsel, and did it after consulting with a number of gentlemen, who agreed perfectly in the operative procedure.

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* Reported to the Louisville Clinical Society, and stenographically reported for this journal by C. C. Mapes.

I removed it, first, because the breast was functionally destroyed from the ravages of multiple abscess; second, the low state of health, and because these breasts, we know, are prone to take on malignancy. It is the first breast I have amputated for a condition of this kind, but am more satisfied than ever as to the advisability of the procedure, and the pathologist reports that the breast was destroyed and the condition was but a suppurating fibroma.

SUPRAPUBIC CYSTOTOMY FOR FOREIGN BODY IN THE BLADDER.

By I. N. Bloom, A. B., M. D., Louisville, Ky.,

Clinical Professor of Genito-Urinary Diseases in the University of Louisville, etc.

The following case illustrates what some people will resort to in an endeavor to increase venereal excitement. In July, 1895, there appeared at my clinic at the University of Louisville, a German, Mr. X——, aged sixty-four years, who was suffering from a slight bladder neurosis. His urine upon examination showed nothing abnormal, and the symptom from which he most complained was frequent micturition, especially at night. A careful examination of the prostate showed slight enlargement, which was non-lobulated, and the sound treatment was advocated and practiced. About the middle of October the patient stated before the class that he had to get up at five o'clock in the morning to urinate, going to bed normally at ten.

The patient was dismissed and I did not see him again until March 13, 1896; he then gave the history that, having a wife fourteen years younger than himself, he had felt that he should have sexual intercourse more frequently than his natural inclination led him to. About the time he left my care he was advised by a friend to use a little ivory instrument (which I will show you in a moment) to strengthen his erections. He had used this habitually from the middle of October until the time I saw him, March 13th. A week before I saw him he had had sexual intercourse with his wife, and in the progress of that intercourse the instrument had slipped into his bladder and had remained there, causing certain symptoms; the day before the operation he told me that he had urinated twenty-five times by actual count, and ten times by actual count during the night. The man was physically in good condition, and on Friday morning a week ago, and one week after it had slipped into the bladder, I put him on the operating table before the class and did a suprapubic cystotomy and extracted the short ivory catheter. I did the operation by making an incision in the median line, about two inches in length, and afterward tamponed with iodoform gauze. After the operation a thing happened that I have never had before in the twelve suprapubic operations that I have performed, that is, the patient Friday afternoon urinated through his penis. That is, urination Friday evening and Saturday with the tampon in place, was largely through his penis, perhaps one-half; at any rate it was not in drops but in drachms that it took place. On Sunday I removed the gauze, when the drainage was principally through the belly wound, as was also the case on Monday, but urination was partly through his penis. It went on in that way until now. I saw him this morning, and there is not more than one drop in ten minutes passing through the belly wound. The instrument was not broken; it is a piece of ivory three and a half inches in length, with a diameter corresponding to Charrière No. 20; he had been advised by his friend to use this to strengthen erection mechanically. There are no incrustations on it, although it had remained in the bladder a week. Not an unpleasant symptom developed until last night, when the man, who is a well-to-do German, indulged a fondness for canned peaches, and ate a very large quantity of them, and during my temporary illness my assistant neglected to purge him, resulting in quite a severe attack of indigestion. He has recovered from this, however, and his temperature to-night is normal. The case is of interest both psychologically and, I think, surgically.

REMARKS.

Dr. Carl Weidner: I would like to offer an explanation as to why the urine began to pass through the normal channel so soon after the operation in this case. As the doctor in the case simply had to deal with a foreign body which had remained comparatively a short time in the bladder, not having caused any chronic changes in the mucous membrane, resulting in more or less obstruction to the normal channel and in the bladder itself, should we not expect the urine to seek the normal channel more rapidly than in the more chronic form of cystitis with which the surgeon has to deal? Reasoning from analogy I should think that the more recent the injury to any organ the more rapidly it would establish proper function after relief of the trouble.

In this connection I remember reading in a French medical journal some years ago an article, which I translated at the time, where a man inserted a pig's tail into the urethra for the purpose of masturbation. This slipped into the bladder and was removed by operation. It simply shows what the human race is capable of doing to excite the sexual functions.

Dr. W. C. Dugan: Explanation of the urine passing through the normal channel in Dr. Bloom's case I think is plain. We find that shortly after an operation of this kind the lips of the wound come together and the exudation of lymph holds them together temporarily, and naturally urine passes through the normal channel. If suppuration is set up later, then this union is broken down mechanically and the urine will pass from above.

Dr. I. N. Bloom: I would like to ask Dr. Dugan whether it is usual for the urine to pass through the normal channel so quickly. I thought perhaps the gauze in the bladder for twenty-four hours after the operation might have held the incised portions more closely together than they would have been without the gauze, and in this way allowed the urine to pass through the normal channel.

Dr. W. C. Dugan: It is not at all uncommon for urine to pass through the natural channel soon after an operation of this kind, for the reason that I have already given.

Dr. T. C. Evans: I wish Dr. Bloom would tell us if it is a common occurrence for persons to use an instrument such as he has shown us for the purpose he has stated?

Dr. I. N. Bloom: There is very little to be said on the subject, except that numerous instances are mentioned in medical works where mechanical contrivances have been used by sexual perverts to excite the sexual feelings. I believe that all people who resort to means of this kind are sexual perverts. You probably all remember the case where Nelaton had to operate to remove a beer glass from the anus of a patient. We know that these cases do occur, but they are more common in the female organs, not only in the vagina, but in the bladder; it is not uncommon to find hairpins, button hooks, etc., in the female bladder. How they get there, whether the result of masturbation or perverted sexual tendencies we cannot tell. As far as this individual case is concerned, there is nothing remarkable about it except that it occurred in a man sixty-four years of age. In young men, who are much more frequently masturbators, we might expect to encounter such a case more often.

The case I have reported is somewhat exceptional, however, in America, where we have reason to believe that the morals are infinitely better than those of older countries.

TRANSLATIONS, GLEANINGS, Etc.

TORTUOSITY OF THE TEMPORAL ARTERY AND ITS CLINICAL SIGNIFICANCE.

By MÉNÉLAS SAKORRAPHOS, M. D., OF ATHENS.

Translated from "Progrès Médical," by J. A. Carmichael, M. D.

In a large majority of cases, and from an anatomopathological point of view, chronic diseases of the order dystrophic, manifest themselves by arterial sclerosis. General arterio-sclerosis is the great enemy of advanced life. All chronic lesions commence by endo-periarteritis, and by degrees terminate in sclerosis of an organ, if it is localized, or of the entire organism if it becomes general. It is easy to comprehend that under such circumstances the whole organism becomes subjected to the destructive influence of this general lesion, which interferes with nutrition, because the elasticity and permeability of the vascular system constitute the primary conditions of physiological nutrition. These conditions wanting or defective, perfect and complete nutrition becomes impossible.

Hence, we see arterio-sclerotic subjects become prematurely old, the vitality of their tissues is feeble, and they resist exterior influences just like the organism of the really old. An external cause that would signify nothing in the healthy is to them serious enough to endanger life. Dystrophic maladies, especially those characterized by general arterio-sclerosis, are hereditary. Heredity is transmitted in a progressive form; that is to say, that the descendants present clinical symptoms much more pronounced than those manifested by their predecessors, and this progress tends constantly to the end of the malady, to terminate finally in the extinction of a generation. It is in the arterio-sclerotic descendants particularly, that the clinical sign of the tortuosity of the temporal artery has been observed, a sign of great clinical value; in effect it indicates the malignant form of arterio-sclerosis. Prof. Dieulafoy has described this sign in the course of interstitial nephritis, which is but one of the more frequent localizations of general arterio-sclerosis. No one, as far as we know, has drawn attention to this subject.

Basing our opinions always upon personal observations, we have been able to determine that the tortuosity of the temporal artery usually manifests itself between the ages of twenty-five and thirty years in hereditary arterio-sclerotics, in whom it is easy to see the existence of ancestral arterio-sclerosis. There also exists between these individuals a striking resemblance in certain external characteristics. All are meagre and thin in body, of quick and irritable temper, and an inaptitude to pursue for a length of time any given subject, however interesting it may be, because of the fatigue experienced by the slightest application or attention. In fine, they present all the special characters that clearly indicate abnormal functional operation of the nervous system. On the appearance, or a little after, of the temporal sign, they complain of palpitations and lassitude, and experience slight dyspnœa. On auscultation, a clacking or creaking of the second sound is observed at the base of the heart. Visual obscurity occurs, with or without apparent cause, and during the night they require to urinate frequently.

Frequent examinations of the urine give negative results. The appearance of the temporal sign is followed by other slight symptoms, transient, but co-existing with it. As physician at a hospital for the aged, we have had opportunities of observing more than a hundred patients, and very rarely have we seen this sign as pronounced as in the descendants of arterio-sclerotics. We make this remark because all authors are not in accord as to the causes that produce arterio-sclerosis. Most of them accept the idea that the struggle for life, imperfect physiological function, humid and unhealthy locality, alcoholism, and especially the abuse of liquor of bad quality, are powerful causes in creating arterio-sclerosis. Others deny some of these causes, particularly alcoholism.

Lancereaux: Although there are differences of opinion respecting them, there is no denial of heredity.

We think that general arterio-sclerosis may proceed from these causes, is compatible with longevity, and is only a mild form of arterio-sclerosis; hence we see so many old arterio-sclerotics live a long time. It is not so with their descendants. In them the progress is rapid, the temporal sign manifests itself quickly, and those who are attacked die at an early age. It remains to be demonstrated if the descendants of the non-hereditary arterio-sclerotics exhibit this sign. This we cannot absolutely affirm at present. The flexuosity of the temporal artery is followed by sclerosis of the cerebral, or renal or coronary arteries, and it is by a lesion of these three organs that hereditary arterio-sclerotics generally die. Two of our patients were attacked by overwhelming apoplexy—cerebral hemorrhage—and one by syncope—sclerous myocarditis. It should be added that the parents of the two first died of cerebral hemorrhage, but at an advanced age—about sixty years. Of the two last, one reached forty-five and the other fifty, thus confirming what was previously said about the progress of general arterio-sclerosis. We communicate these reflections, the result of personal observations, in order to draw the attention of the profession to the temporal sign, which we consider of the highest importance.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Hot Water in Gynæcology.—In *La Semaine Médicale*, Vol. III., No. 47, Dr. Paul Reclus is quoted as an ardent advocate of the methodical use of hot water in surgery, attaching much importance to the degree of temperature in relation to the various diseased conditions. We subjoin that portion of the lecture which relates to the use of hot water in gynæcology, and give the method which Dr. Reclus employs in treatment:

"The time is now past when apparently well-informed surgeons proposed and practiced extirpation of the adnexa for the relief of pain on pressure in the vaginal cul-de-sac, ill-defined infiltration of the region, menstral troubles and a sensation of weight in the lumbar region. More than this is now required to justify laparotomy. Never operate in the presence of these affections of the true pelvis before having recourse to medical treatment in which hot-water enemata constitute the principal factor. The results obtained in this way are so satisfactory that at the Pitié Hospital they only operate on one out of three patients admitted for undoubted oöphoro-salpingitis.

"Following the example of many of my colleagues, I begin by disinfecting the vagina and uterus, followed by dilatation of the cervix and prolonged drainage, packing and, if necessary, curetting the uterine cavity, the walls of which I treat repeatedly with topical applications, such as tincture of iodine, creosote, and graduated solutions of zinc chloride. Though it is not unusual to employ hot water, this water is not, as a rule, hot enough, the temperature ordinarily being from 40° to 45° C., whereas I use water of at least 50°, and still more frequently 55° C. The principal difference, however, is that while other surgeons have recourse to vaginal irrigations, I employ enemata.

"Not that I would dispense with vaginal injections, were it only for cleansing the vagina, a result which is by no means to be despised; but it must be remembered that this is about all the benefit to be derived from such injections, which have little, if any, modifying effect on congestion of the uterus and its appendages. Their use rests on an anatomical error, for, if it is desired to reach the uterus, ovaries, and oviducts, the operations must be carried out through the rectum. An enema results in the accumulation of hot water in the ampulla of the rectum, into which the internal genital organs project. Enemata must, therefore, be resorted to under these conditions.

"It is better to take them in the morning, about half an hour before rising. The irrigator, filled with water at a minimum temperature of 55° C., is placed on the night-table, the cannular is introduced above the sphincter, and the tap is slowly opened, so that only a small quantity of liquid passes into the intestine, the slowness of the process preventing contraction of the muscular coat. In this manner, therefore, a much larger quantity of water can be introduced than if a strong jet were turned on at once. Should, nevertheless, a desire to defecate manifest itself, the water is shut off until this desire has passed, after which the tap is again slowly opened. The patient should retain the enema for half an hour, if possible. Then she is allowed to evacuate the liquid, repeating the operation the next morning.

"By this antiseptic treatment, drainage of uterus and hot enemata I have succeeded in relieving, and even curing, a large number of cases of peri-metro-salpingitis. The infiltration of the cul-de-sac disappears, the peristaltic movements of the intestine break down the adhesions, and instead of large masses filling up the true pelvis, the exudations and purulent collections are absorbed, the vaginal cul-de-sac becomes supple, the uterus movable, and the region in question resumes almost its normal condition, especially after judicious and moderate application of massage. I have on many occasions seen the tumor entirely disappear, and this result was in a large measure attributable to the use of hot water, which is of the greatest value in surgery."

The Treatment of Erysipelas With Applications of Vaseline.—Koster (*Sem. Med.*, 1896, No. 9) has made a comparative study of the results of treatment in a large number of cases of erysipelas, in which various methods were employed, including painting with tincture of iodine, spraying with mercuric chloride, and applications of ichthyol and of simple vaseline, and found that the results with the last were quite as good as those with any other measure, as regards mortality, complications and extension. The applications of vaseline were made twice daily, and covered by gauze with a certain amount of compression.

Stibium Arsenicosum in Chronic Bronchitis.—Stibium arsenicosum, the *Medical Century* says, is an excellent remedy in chronic bronchitis. It is reported to have cured a case of six years' duration, where there was great emaciation; pulse, 115; temperature, 103; and severe night sweats and incessant cough added to the seriousness of the condition. Its special characteristics are great rattling in the chest, restlessness, and scant expectoration.

The Balsam of Peru Treatment of Scabies.—Julien and Descouleurs call attention to the advantages of the above non-sulphurous treatment of itch, their conclusions being based upon 300 cases observed both in private and in hospital practice (*Charlotte Med. Jour.*). It is known that the acarus placed on a watch glass and exposed to sulphur fumes may remain alive for sixteen hours, and that it generally survives over an hour's immersion in flour of sulphur and Helmerich's ointment. Dr. Descouleurs placed six in contact with balsam of Peru and found that in ten minutes two were dead; in twenty minutes three more had succumbed, and the last of the six died soon after. This experiment confirms the conclusions of Burchardt, who, moreover, discovered that the balsam kills the eggs as well. It is probable that the volatile oil, cinnamein, that according to Fremy is the essential constituent of the balsam, kills the acarus at a distance through asphyxia, and not through a corrosive action or by disruption, for Hebra has shown that the parasite can live for a week in water at 30° C., and Dr. Descouleurs has witnessed survival for three and a half hours in glycerine. The application of the method is simplicity itself. No soap is required, the balsam being painted on the surface, and then gently rubbed into the whole body with the hand. The remedy being volatile, penetrates readily into the "runs" without involving the necessity of opening these up. The patient remains thus all night, a warm bath being taken in the morning, when the cure is said to be complete. A repetition of the process, if necessary, produces an irritation of the skin. Inveterate cases, that had resisted the classical and rather severe *frotte* at the St. Louis Hospital were all invariably cured by this method, which would seem to be specially indicated when scabies is complicated with impetigo, eczema, ecthyma, and boils, and also in cardiac cases, pregnant women, and feeble subjects with delicate teguments, *e. g.*, babies. The rather agreeable odor of the balsam tells greatly in its favor, especially in private practice.

Asafetida in Obstetrics.—Warman (*Brit. Med. Jour.*) finds that this drug is a most valuable therapeutic agent in midwifery. It is a direct sedative to the pregnant uterus, and exercises no evil influence over the general system. It is of particular value when abortion is imminent, as it controls uterine irritability. On the other hand, it is of no use as a prophylatic agent in such cases, and must not be relied upon when the abortion has proceeded so far as to require manual interference. In habitual constipation and in nervous conditions during pregnancy it is highly beneficial.

Serum Therapy for Cobra Bite.—The Pasteur Institute has succeeded in preparing a serum which is found to be a perfect antidote for the dreaded cobra bite. A supply of this serum recently sent to Agra proved a successful remedy against the cobra bite in both men and beasts.

Horse's Serum as a General Tonic.—Lacruz (*Arch. de Gin. Ostet.y Pediatria*) has tried the effect of serum from a healthy horse on several children in his wards. Doses of from 3 to 5 c. m. were injected daily, and repeated every day for three or four weeks. The serum seems to act as a most powerful tonic. The red corpuscles increase in number, weight is gained, and the child visibly becomes stronger. There is no ontoward secondary effect except slight rise of temperature and some acceleration of the pulse; there is no erythema and no albumen. A trifling epithelial deposit seen in the urine indicates slight irritation of the kidney, and the urine becomes more acid. These phenomena, however, are merely transient. The good effects of the injections are quickly manifested, cases of athrepsia in particular are speedily benefited, and the cure is maintained. Sixteen cases of chorea treated in the manner described were cured in a period of fifteen days on the average.

A Case of Erythematous Lupus Cured by Injections of Lamb Serum.—At the séance of January 9, 1896, of the Société Francaise de Dermatologie et de Syphiligraphie (*Ann. de Dermatol. et de Syphilig.*, No. 1, 1896), Legrain reported a case of erythematous lupus of the face, cured by injections of serum obtained from the lamb. The disease had been treated for more than a year with the local applications usually employed in such cases, without success. Potassium iodide had been given internally without effect, and linear scarifications, while producing a slight improvement, had not been of more than transient benefit. Two months after cessation of all treatment two injections of lamb serum, of 10 cubic centimeters each, were given at intervals of five days. Three days after the first injection the patches were paler, and ten days after the second they had disappeared without leaving any trace.

Theobromine in Renal and Cardiac Disease.—Prof. Huchard, of Paris (*Bull. Gen. de Ther.*), gave the details of fifteen cases under his care at the Hôpital Necker, in which he used this drug, and stated that numerous observations warranted him in asserting that theobromine is one of the best and most reliable and constant of diuretics in the treatment of anasarca or œdema, associated with affections of the heart or kidneys. It is a direct diuretic, acting at once on the renal epithelium, exciting and increasing the function of the latter without altering it. Theobromine is especially effective in cases in which there is both cardiac and renal sclerosis, in valvular disease complicated with albuminuria, or at the stage of asystole, and in interstitial or parenchymatous nephritis. In order to prolong the effect, it is advisable, especially in cardiac disease, to give theobromine for six days, and to follow up the last dose in a few days by 0.0005 to 0.001 gramme (1-130 to 1-64 grain) of digitaline for one day. The diuresis caused by the theobromine is rapid, occurring on the first day of its administration and persisting from two to four days after the last dose. There are no cumulative effects, more than 3 grammes (46 grains) producing, in certain persons, headache, nausea and vomiting, but rarely cerebral excitement. An average dose is from 2 to 3 grammes (31 to 46 grains) in wafers containing 0.50 gramme (7¾ grains). Larger doses, 4 to 5 grammes (1 to 1¼ drachms), are without danger and are often employed. In infectious diseases in which the elimination of urine is of great importance, as well as in severe forms of hepatic disease in which the hepatic cells are involved, milk diet combined with theobromine, in daily doses of 2 to 3 grammes (31 to 46 grains), produces excellent results by insuring and increasing diuresis.

The Treatment of Sciatica by Compression.—The *Bulletin Medical de Paris* states that M. Negro has reported 113 cases of obstinate sciatica in which this new treatment has resulted in recovery. The procedure is as follows: The patient lies on his face with his legs extended and resting easily one against the other. The most painful spot is selected, the region where the nerve proceeds from the sciatic opening. On its trunk both thumbs are applied, and it is compressed with the greatest possible force. At the same time slight lateral movements are made without changing the point of pressure or moderating its intensity. This takes from fifteen to twenty seconds, and is followed by an interval of twenty minutes' rest, when the procedure is repeated. After a second application, which is much less painful than the first, the patient is able to walk, and for several hours, or even a day, he may be free from pain. In order to obtain complete recovery, says the author, this proceedure should be practiced about six times a day every two days until the definite suppression of the neuralgia.

Iodine in the Treatment of Granulated Lids.—According to the London *Lancet*, the eminent Russian, Dr. Neznamoff's, custom in treating granulated lids is to paint the mucous membrane of the lids with a solution of pure iodine mixed with liquid vaseline (*oleum petrolei*) twice a day. In chronic cases he uses vaseline containing from a half to 1 per cent. of iodine. In about four days improvement begins, and in about twenty a cure is generally effected.

Chimaphila in Bladder Difficulties.—According to the *Electic Medical Journal*, the really valuable property of *chimaphila umb.* (Prince's pine) is its kindly action in catarrhal states of the bladder. The greater the catarrhal character of the difficulty the better it will act. If pus and blood be voided its efficacy is all the more pronounced. It is not the remedy for acute and inflammatory troubles, but for the chronic and lingering disorders giving rise to excessive voidings of mucus or muco-pus, offensive or non-offensive in character.

In all cases the dose should not be too small. If the infusion be used, and this is a very effective method of administration, a wineglassful of the preparation (℥ ij. to water Oj.) should be given every three or four hours; of the specific medicine give 10 or 15 drops every four hours.

Ferratin, Iron Tonic and Food.—(*Chicago Med. Recorder*, January, 1896.) J. S. Perekhan: The author reviews the literature on ferratin, quoting Schmiedeberg, Germain See, Dujardin-Beaumetz, Marfori, Jaquet, Fackler, Einhorn, and others, and then cites a case of anæmia in his own practice "because the improvement under the use of ferratin was so striking as to merit special mention." Patient, a girl of seventeen, became anæmic after an attack of grippe, lost her appetite, etc.; condition on November 15th as follows: Face pale, of waxy color, lips and conjunctiva almost white, headaches, insomnia, constipation, shortness of breath, bad appetite, etc. Half gramme doses three times daily, with hygienic regulations, caused improvement after first week, and gradually her appetite returned, headaches and insomnia disappeared, red color was restored to lips and face, and within five weeks the blood corpuscle count showed an increase from 2,100,000 to 4,150,000 per ccm. Author concludes that "ferratin can be safely recommended as a hamatinic remedy, with suitable diet, hygiene and exercise not to be neglected."

The Famous Hunyadi Janos mineral water, on account of its reliability, mildness and pleasant taste, has become one of the most popular saline aperients.

RETROSPECTIVE DIETETICS.

Eucasin.—This substance is described by Salkowski as a casein-ammonium compound. It comes in the form of a fine powder, entirely soluble in warm water, or yielding at most only slightly cloudy solution. It is said to be made by passing ammonia over casein, and, according to Salkowski's researches, is a much better nutritive than somatose, since the latter, it is maintained, is not sufficiently absorbed, and in the majority of cases causes liquid evacuations. Eucasin, on the contrary, is held to be better absorbed by the intestines. The observed loss in N was about 14 per cent., against 35 per cent. in somatose. While with other dietetics rich in albumen it is considered necessary to give nuclein also, this is not the case with eucasin Besides, the nucleins being the source of uric acid, while the albuminous nutritives stimulate its production, their use would be contra-indicated in rheumatic and kindred affections. Eucasin, being free from albumen, can, therefore, be used as a substitute, it is argued, and may be added to soups, bouillons, cocoa, etc. With wine or beer, however, it is incompatible.

Levantin, a Coffee Substitute.—Under the name of "Levantin," a new substitute for coffee has been introduced, and lauded as being non-irritant and capable of entirely replacing it. As described by Brunotte (*Zeitsch. f. Nahrungsmit.-unters., Hygi u. Waarenk.*, x., p. 142), it consists of two elements—a granular seed-albumen and the seed-covers. Further investigation induced the belief that levantin is the roasted seeds of *coripha cerifera*, or *copernica cerifera*, a species of palm, which had already been described as a coffee substitute by Planchon and Collin An oil is obtained from the seeds, which are then roasted. The whole roasted bean is not marketable, so it is ground and then sold under the name of levantin.

The strong resemblance which the ground, roasted beans bear to coffee will, it is feared, result in the wholesale adulteration of the latter. The palm seeds serve in their native place as a popular cure-all, as well as a substitute for coffee, and are known there by the name of yunka.

The Use and Abuse of Condiments.—This subject is discussed in the *Dietetic and Hygienic Gazette* for May, by Dr. J. Hobart Egbert, who points out the practical relations which different condiments bear to health and disease, as follows:

Salt, besides being a food, is one of the most useful of condiments, for it not only increases the palatability of food, but materially promotes the digestion of albuminous substances, and aids the absorption of the scantily soluble fats. Patients who raise blood, either from the stomach or lungs, should not neglect salt from their diet, while those suffering from dyspepsia and chronic gastric catarrh may find relief in the more liberal salting of their food.

Next in order of consumption comes black pepper, the propriety of the liberal and constant use of which with food may justly be questioned. It is a typical stimulating aromatic condiment. That pepper is not harmless is shown by the fact that when taken in excess it induces intestinal inflammation, burning pain in the epigastric region, great thirst, and sometimes vomiting. In several cases which have been recorded, the immoderate use of pepper has even been followed by rigors, convulsions and delirium. The general table use of pepper should be lessened, and among the plethoric even entirely discontinued. In paralyses which require an active stimulant, in weakened and reduced conditions of the system resulting from chronic debilitating affections, for those of asthenic and leucophlegmatic temperament, and in atonic dyspepsia, black pepper, in moderate quantities, is a fitting condiment.

Cayenne, or red pepper, is a condiment of stimulating and irritating properties, and is possessed of curative virtues. We recommend its use, as a condiment, to those disposed to malarial attacks; to weakly and overtaxed subjects suffering from atonic forms of dyspepsia; as a curative agent in chronic diarrhœa, and preventive of cholera; and as a general substitute for alcoholic stimulants for those addicted to their use.

Mustard is in general use as a condiment; nevertheless it would doubtless be better to confine its use to the methods of curative dietetrics. In certain forms of indigestion with constipation, torpid liver, and loss of appetite, good mustard used as a condiment may prove of value, but its general table use should be discouraged. Owing to a mild expectorant action when taken in small quantities, mustard with food has been recommended in chronic catarrhal bronchitis and allied disorders of the lungs.

Vinegar is a condiment of value, as it not only stimulates digestion, but also exerts a direct solvent action upon certain ingredients of our food. It readily transforms the glutin and fibrin of albuminous substances into a loose gelatinous mass, and is capable of transforming cellulose and starch into sugar. Hence, we are ready to admit that, in the majority of instances, vinegar is an allowable condiment, providing a fairly pure cider or wine vinegar, entirely free from sulphuric acid, is employed. Theoretically, at least, vinegar should not be added to peas, beans and lentils, and to soups made of the same, as it not only will not dissolve the legumin which they contain, but renders its solution more difficult. With the exception of legumin, albuminous substances are dissolved by vinegar, and this solvent effect is carried even as far as the blood. Owing to the solution of constituents of the blood, and the resulting increased liquefaction, vinegar has been used to reduce corpulence, which it may indeed effect though its use for this purpose can hardly be recommended.

Water cress, radish, parsley, onions, leeks, and similar vegetables which are served fresh, are proper appetizers, also breaking the monotony of a limited diet and stimulating digestive processes. They undoubtedly constitute the best variety of condiments—or accessory food products—for general use. Olives, pickles, chow-chow and similar spiced and pickled products are to be regarded as harmful or beneficial, according to the kind and amount of condiments they represent. Grated horse-radish may be mentioned as one of the best condiments to assist in the digestion of heavy meats, as pork, etc. The vinegar which is added to horse-radish increases its digestive qualities. Ketchup, meat sauces, and dressings are allowable when the appetite requires encouraging and the body needs stimulating, but their causeless and continual use is decidedly wrong. Apoplexy and even insanity are perhaps engendered by the unwarranted use of heating, stimulating condiments.

In conclusion, we would add that the use of condiments generally, when not employed for a definite purpose, should be discouraged. During convalescence from acute illness, in conditions of temporary debility of the digestive functions, during the decline of advanced old age, and for the relief of definite disorders, as already pointed out, good results may follow the judicious use of condiments. Thus, by their proper application to abnormal conditions, the quality of the blood may be improved, the body may be invigorated and strengthened and supplied with better digested and more easily assimilated food; while, on the other hand, their irrational and immoderate use weakens both mind and body, predisposes to disease, renders the passions more ungovernable, and shortens life. It is not necessary that all should forego the use of condiments with their food, but it will be well for most people to exercise due judgment in their selection, as well as to limit the quantity consumed, ever remembering that "an excess of stimulants is much more dangerous than a superabundance of nutriments."

SPONGE AS A BED FOR AN ARTIFICIAL EYE.

Dr. E. Oliver Belt, of Washington, D. C. (*Medical News*, June 27, 1896,) proposes the use of the sponge after enucleation of an eye-ball, as a bed for an artificial eye. He says: "A globe of fine, soft sponge about three-fourths the size of the eye-ball (previously sterilized in 5 per cent. formalin solution and rinsed in the salt solution) is then inserted into the socket or capsule of tenon. The conjunctiva is brought together and sewed with rat-tail sutures. The eye-lids are then closed with compress and bandage. In a few weeks the sponge is filled with new tissue, which in time become firm, solid flesh, making a full orbit and a fine support for the artificial eye. The sponge fibers are apparently absorbed." In the five cases operated, the result is said to have been fairly good.

WANTED, A NEW AMERICAN HOTEL IN PARIS.

There appears to be a splendid opening in Paris for a first-class hotel on the American principle. The only hotel we know of as being really first-class and with suits of apartments on the American principle, is the Hotel Windsor, but which is generally full, and, being most comfortable, is extremely popular. There are two small American hotels of the boarding house type, we are told, besides, but the accommodation is limited, and they are consequently always full.

Now, any capitalist or syndicate who would establish a large first rate hotel, with American home comforts and a good English speaking service, would quickly make an enormous fortune, particularly as the exhibition of 1900 is not far off.

French hotels leave much to be desired, and many of the first-class ones are not all that American ladies, traveling alone, may desire. What is wanted is a first-class American hotel, with good cooking and perfect sanitary arrangements, bath rooms, etc.

Any one seriously interested in this matter we shall be happy to place in communication with our European medical correspondent in Paris.

WHEN AND HOW TO BATHE.

Dr. Cyrus Edson, ex-President of the New York Board of Health, writes concerning bathing, in June *Ladies' Home Journal:* "A cold douche or any form of shower bath should not be used when a person is tired or exhausted from any cause, as the reaction, on which the shock depends for its beneficial effect, does not follow effectually when the system is tired.

"The result of the shower in such a case is apt to be internal congestion, which may be disastrous. It does not follow, however, that a perspiring person should not bathe until cooled off. As a matter of fact, if the person is not exhausted, the fact that the pores are open is rather advantageous than otherwise, as the reaction is enhanced and will probably follow more energetically. A bath should never be taken within two hours of a hearty meal. The first effect of immersion in warm or in cold water is to seriously derange the digestive process if that is progressing at the time, and by a physiological effect that naturally follows, to unbalance or derange the whole nervous system. The result of this is extremely dangerous to the bather. There are numerous instances of severe illness and even of death, caused by bathing while the stomach was full."

Thyreoiodine given in 5-grain doses three times a day is said to be a remedy for obesity, producing an increased excretion of nitrogenous matter.

MISCELLANY.

—False teeth are now made from paper, and are said to last a lifetime.

—Gonorrhœal epididymitis is relieved by sulfo-icthyolate of ammonia, 1-10, with glycerine.

—Never neglect to examine the lungs in all cases of ischio-rectal disease and fistula in ano.

—Dr. P. Playfair has compromised his case with Mrs. Kitson by paying $50,000, including costs.

—San Francisco has a physician ninety-four years of age, who has been in active practice sixty-four years.

—Dr. J. S. Billings has received the honorary degree of doctor of medicine from the University of Budapest.

—*La Semaine Médicale* announces two cases of mania cured at Montpellier by injections of serum from a recovered maniac.

—It is said that one-tenth grain of apomorphine, given hypodermically, will break up and thereafter prevent any attack of hysterics.

—Burns: First relieve irritation with carron oil (linseed oil and lime water); then dress with aristol ointment, over which place cotton batting and bandage.

—Golowkow announces in *Wratsch*, No. 7, that he has demonstrated beyond a doubt that the cholera vibrio can penetrate the shell and enter hen's eggs.

—ETHER COLLAPSE.—One part of camphor to ten parts of olive oil used hypodermically is effective in ether collapse. One grain of camphor may be given.

—The *Druggists' Circular* says that oil of eucalyptus applied with a camel's hair brush over the surface of chilblains or soreness of the feet gives prompt relief.

—WHAT NEXT?—Paderewski is said to have discovered strange and beautiful melodies in the music of the Chinese, showing an advanced state of musical development.

—Dr. Yung-Mung-Fueng, a graduate of the Royal Medical College of Canton, was recently registered as a practising physician in St. Louis, and will open an office there.

—It is said that the New Mexico Territorial Board of Health recently recommended the use of the patent medicine almanacs as receptacles for the sputum of consumptives.

—A high authority asserts that a homicide takes place every two hours in Italy, day and night, ten times as many as there are in France, and thirty-five times the number in Denmark.

—It is stated that the prime cause of the recent fatal illness of Archduke Karl Ludwig of Austria, brother of the Emperor, was found in the water of the River Jordan, which he drank as a matter of religious devotion.

—The late Dr. John Grieve has bequeathed £8,000 to the University of Glasgow for the endowment of a lectureship, or fellowship, or a scholarship, to which orphans or the sons of widows shall have the preference.

—The Sisters of Mercy have nearly completed their retreat for consumptives in the Adirondacks. Sunrise Mount is the name they have given it. It is 2,000 feet above sea level, and is surrounded by miles of pine forests.

—A French gynæcologist has reported the case of a woman who has been in the habit, for more than twenty years, of using a lemon in lieu of a pessary. The effect was quite satisfactory, and no harm appeared to follow the practice.

—If preliminary education be a good thing for students, why not apply it to professors? asks the *Tri-State Med. Journal*, and suggests a State examination of all who profess to be professors. "There would be a scattering in some quarters."

—A very small amount of alkali is sufficient to keep metal from rusting, so that if steel, iron, nickel or copper instruments are dipped in five grammes alcohol containing one or two grammes of either borate, carbonate, bicarbonate or benzoate of soda, they will not tarnish.

—A Swedish engineer has invented a butter-making machine which will transform sterilized milk into butter in one minute. The product is absolutely sterile. Another advantage is that the milk can be converted into butter directly after being obtained from the cow.

—Rabies is almost unknown in Norway, Denmark and Sweden, where a quarantine is established to keep out all but valuable specimens of dogs. English investigation shows that the disease is specially prevalent among dogs that are kept as domestic companions or pets.

—It has been recently found that most antiseptic ointments are of very slight value, the peculiar qualities of a disinfecting substance being nullified by the action of the oily material with which it is usually incorporated. Lanolin is one of the least objectionable of these substances.

—The Ohio Wesleyan University, located at Delaware, O., is to have a medical department, which will be known as the Cleveland College of Physicians and Surgeons, having its home in Cleveland. A new laboratory will be erected at the cost of $50,000. Dr. Charles B. Parker is the new dean.

—For a boil on the end of the nose, where an ordinary poultice would be of no avail, Dr. Carl Seiler recommends a raw cranberry, crushed and laid over the part, and kept in place with a dab of stiff boiled starch. He finds it to relieve the excruciating pain in a short time, and cure the trouble in twenty-four hours.

—In a Chicaco court, recently, Dr. Jno. A. Wesener sought to recover a fee of $150 for professional services in the treatment of the liquor habit. The contract provided for the complete cure of the patient, and the litigant's word that he had not been cured was taken as sufficient evidence to defeat the physician's suit, against whom a verdict was rendered.

—In 1888, W. E. Smith invented the drop-frame bicycle and built one for his wife. Mrs. Smith's first wheel weighed sixty pounds. She herself tipped the scales at eighty. Since then she gained forty pounds, and her wheel has lost exactly the same amount, which (the *Medical News* thinks), says a great deal for the evolution of both women and bicycles.

—More than 155,000 children under one year of age die annually in Paris, the greater number of them owing to neglect on the part of their mothers. The proportion of illegitimate births, which at the beginning of the century was 4 or 5 per cent. of all births, is now nearly 9 per cent. for France, and 28 per cent. for Paris. Among the children of Paris wet-nursed, the average mortality is 77 per cent.

—Dr. Louis McLane Tiffany, for many years a prominent teacher of surgery in Baltimore, says that he never saw a case of hydrophobia in an extensive surgical practice of twenty years. He further declares that he never saw a surgeon who was certain that he had seen a genuine case. There is no doubt that most reported cases are only instances of tetanus when following soon after the reception of the injury, or of meningitis or other cord lesion when occurring many months after the dog bite.

—In a paper recently read before the section of public health of the Academy of Medicine, Dr. R. G. Freeman concludes that the milk delivered in this city, and presumably all cities, contains enormous quantities of bacteria, due to defective dairy methods and slow delivery of milk to customers; that much sickness has been produced by the presence in milk of germs of typhoid fever, diphtheria, scarlet fever and tuberculosis, and that proper inspection and legislation may remedy this condition of affairs.

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ORIGINAL ARTICLES.

TWELVE YEARS' WORK OF THE LADIES' HEALTH PROTECTIVE ASSOCIATION.

BY MRS. RALPH TRAUTMAN, PRESIDENT.

IN November, 1884, eleven women residing on Beekman Hill, whose houses are beautifully located on a high bluff overlooking the East River, with everything desirable to make them healthful, were so outraged at the continuance of the foul odors which polluted the atmosphere of the entire neighborhood, causing them to keep windows closed in the hottest weather, and depriving them of their inalienable right to pure air, that they resolved to investigate the cause of this nuisance.

Accordingly they made a tour of the neighborhood, in that section of the city known as the Abatoir District, which runs on First avenue from Forty-third to Forty-seventh street. Their first visit was a revelation, and while they returned to their homes ill from the inspection and the discovery of the nuisance by which they had so long been tortured, they decided that some action must be taken to better the condition.

The following morning their number was increased to fifteen, and it was resolved that these women should form themselves into an organization, to be known as the Ladies' Health Protective Association.

The first action of the new society was to proceed against the nuisance which had been causing them so much discomfort. This was an enormous accumulation of manure, 20,000 tons, 30 feet in height, 200 feet in length, which was in a decayed and reeking condition, the steam issuing from it filling an area of miles with its vile odors.

This abominable nuisance was maintained by Michael Kane, who, with a brother-in-law a Senator at Albany, was able with his political backing to defy all law and decency. The manure in its rotted state was of much more value as a fertilizer, and Mr. Kane's revenue was largely increased by letting the vile stuff remain there to rot while an entire community was made to suffer.

Our first step was to appear before the Grand Jury, and Mr. Kane was indicted for maintaining a public nuisance. He cared very little for this action, as he had several indictments holding over him, which had always been pigeon-holed, and he thought this one would travel the same road, but it was his first experience with women, and he did not realize what that meant. He was tried before Judge Barrett, in the Court of Oyer and Terminer, and after a trial lasting for four days, through which he was defended by that able lawyer, Algernon Sullivan, he was convicted and found guilty of maintaining a public nuisance. Before sentence was imposed upon him, Judge Barrett gave him thirty days to remove the accumulation, and he was compelled to employ a large force of men to accomplish it.

From that time until the present we have never ceased our vigilance, and while Mr. Kane made every effort to continue the nuisance in a covert manner, he finally became amenable to the law, and to-day his business causes us very little discomfort.

In those days our officials were indifferent, and as this was the first time women had attempted to interfere with any of their duties, they looked upon our action with great disfavor and met us with antagonism at every step. General Shaler, then President of the Health Board, when called upon the witness stand during the trial, stated that he had neither visited nor had a report of that section of the city for over six years. He was found direlect in his duty, and reprimanded. After the verdict against Mr. Kane we were told by Commissioner French, a member of the Health Board, that he was surprised at the verdict, and we were interfering in matters that did not concern us.

This was the beginning of our work, and on the 9th of December, 1895, we secured our State charter, and became an organization for the purpose of sanitary improvement of our city.

Notwithstanding our victory with Mr. Kane, a little further experience proved to us what a Herculean task we had undertaken. We were, however, earnest women, fully aroused to the necessity of action for the benefit of those who were less fortunate in life and unable to help themselves.

In close proximity to the manure ground were the slaughter houses, where meat was killed and dressed for daily consumption, and adjoining them was the fat-rendering and bone-boiling establishment of Messrs. Rafferty & Williams.

The state of affairs here was simply appalling, and we wondered how the occupants of the tenement houses all around that section were able to exist, the only solution to the problem being the counter action of the salt air, as they were so close to the river front.

We were confronted with fifty-five dirty little pens, called slaughter houses, the proprietors of which seemed to be perfectly satisfied and devoid of any idea of improvement. The slaughtering was done in the presence of children, who stood before the doors, and became so utterly demoralized that the sight of blood was no more to them than so much running water. The walls and floors of these pens reeked with filth, and the meat when slaughtered was hung on large hooks over the curbstone, there to swarm with flies and catch all the dust and dirt of the neighborhood. The cattle were driven through the streets in droves, and when they reached the slaughter houses were confined in cellars, the air of which was so stifling and fetid that the poor creatures could be seen clambering over each other in frantic efforts to reach up to the gratings for a breath of fresh air.

Our course for the abolishment of this nuisance was an appeal to the higher authorities, by the presentation of a bill to the Legislature, where, as we expected, we were defeated, but the amount of money it cost the butchers to defeat the bill caused them to recognize the fact that we intended to effect reform in their establishments. This effort caused a joint conference, held with a committee from our Association and four of the butchers having the largest interests, who represented all of the butchers in the city, the result being a compromise, we agreeing to take no further legislative proceedings if they would adopt the list of reforms which we had prepared, they in turn accepting all of our suggestions. While the money consideration in the Legislature had been a great incentive to consider the reforms we asked, our demands were so great that they found it was much cheaper to tear down the old pens they were using and erect new buildings, and to-day the business is carried on in three model abatoirs, furnished with all the improved machinery known to modern science. Messrs. Schwarchild & Sulzberger were the first to erect one of these model abatoirs; they were followed by Messrs. Fleischauer & Co., with one for smaller stock, and since our last report a fine abatoir has been erected by the United States Dressed Beef Co., the former and latter taking in almost the entire blocks between Forty-third to Forty-fourth streets, and Forty-fifth to Forty-sixth streets, from First avenue to East River.

When we began our crusade against the slaughter houses we found in the same section a bone-boiling and fertilizing establishment owned by Messrs. Rafferty & Williams, which was an intolerable nuisance, from the fact that bones were collected from retail butcher shops, often when they were several weeks old, and these, when going through the process of boiling, to be made into fertilizers, would give off odors that would permeate the atmosphere for miles, and cause misery and discomfort to hundreds of people. It seems almost incredible that such a nuisance could have existed for so many years in a civilized community. This has been entirely abolished, and Rafferty & Williams have gone out of the business. The fertilizing manufacture is now carried on in connection with the abatoirs; the bones are not only collected daily, but all offal and bones are consumed every day and converted into the fertilizer while in their fresh state. The building in which this process is in operation has been built in the most scientific manner, and every effort is made by the owners to render this business as unobjectionable as possible, and they spare no expense in placing the most improved dryers and condensers for the suppression of the odors. As our membership had largely increased by this time and we were working step by step, taking one nuisance after the other, we divided ourselves into standing committees and tried again to secure the co-operation of our municipal authorities. We prefer this manner of doing our work, and always do our best to avoid antagonizing any of the authorities. We carefully avoid taking any note of politics in our work; we are entirely and absolutely non-partisan, both as to officials and party. We want the right man in the right place, and when there will do our best to keep him there, no matter what party is in power.

In the change of administration we had a change in the President of the Health Board, and Mr. J. Baylis was appointed. From that time matters began to improve, but it was not until 1889, that when Mr. C. G. Wilson was appointed President of the Board of Health, that we could say we had practical and valuable co-operation. When this gentleman was appointed we were doubtful whether so many changes were best, as the work had to be well understood. In a short time, however, we were inspired with confidence when we found that Mr. Wilson was not only practical but a thorough business man, having his inspectors work and working hard himself, not only making personal inspections during the day, but many times leaving his bed at night to trace odors and investigate causes. To-day he has our confidence to such an extent that we know when we send in a complaint or ask assistance of the Board, we will not be required to take any further steps in the matter and the evil will be remedied. We have never worked on theories, but on facts pure and simple.

We next turned our attention to the gas houses, and through our efforts much of this nuisance has been suppressed. Many of the companies have been compelled to put in new condensers, and the old method of emptying the lime boxes has been abolished and oxide of iron used in its place. The sponge is kept well covered, and when the boxes are opened is the means of condensing the odors. We hope to have further improvements in this direction. Our attention was next directed to the filthy condition of our streets, and the slovenly method o handling and disposing of our garbage. It makes me weary now when I look back upon our efforts along this line, and think of the many discouragements we had to contend with. The cry of each commissioner was the lack of sufficient appropriation and the impossibility to eliminate politics from the department. This was in a measure true, but even with these obstacles we could not see the least effort toward improvement.

In those days this Association had small cards printed and sent to householders, asking them to aid the department by burning all their garbage in their kitchen ranges. This feeble effort was well considered in the residential quarters, but the mountain before us was the tenement houses.

During Mayor Hewitt's term of office we drafted and presented to him a memorial, hoping by our suggestion to secure some co-operation. Like the rest it did not receive much attention, but we were determined to renew our efforts.

One of the greatest difficulties in the way of keeping the streets clean was the storing of trucks, carts, etc., in the public highways. This was not only an obstruction to the proper cleaning of the streets, but the trucks afforded sleeping quarters for tramps, and from a moral standpoint were a disgrace to the city.

During the administration of Mayor Gilroy we called his attention to this evil. He received our protest with surprise, and asked us what we expected the people to do with their vehicles. We said: "Store them!" The Mayor said, however, that it could not be done in a city like this. Colonel Waring has, however, given us a proof that it can be done, and also that we can have a very clean city. Under his able and efficient administration we no longer see a set of decrepit, broken-down old men handling the broom in our streets, as if it were a pastime given them to keep them out of mischief. Neither do we see our garbage and ash receptacles on the edge of the curbstones filled to overflowing, and standing for hours, nor yet our streets filled with litter. On the contrary, our streets are like our homes, kept well swept and cared for.

We were delighted with the parade of Col. Waring's men on the 26th of May, and it was received with favor by all of our citizens. It was an inovation, and those who went to scoff were the loudest in their praise. It was the first time in the history of this department that the men could feel some self-respect, that their work was recognized as one of the great departments of our municipality. With self-respect the condition of the men is elevated and much better work is now done for the money expended. We will never go back to the days of filth and dirt again, for the women of our city will never allow the old state of affairs to return.

The solution of the problem as to the final disposition ot garbage seems to be a difficult one, and we have been somewhat discouraged on the delay with this question. We hope that, now the contract has been given, whatever is done, whether cremation or utilization, the trimming of the scows will be abolished, and all of the work done outside of the city limits. We also hope to have the care of the sidewalks under the jurisdiction of Col. Waring, and to have boxes placed at the corners of the streets throughout the city for the use of citizens, to throw paper, fruit rinds and odds and ends in. We consider this will largely prevent the untidiness of our sidewalks.

The school question has been a very earnest one. We have had a Committee on School Hygiene, which, with co-operation of the School Board, have accomplished many sanitary reforms in our public schools. We have been very much pleased with the co-operation of the Board, and we know much more would have been done if the appropriation had been sufficient. Many of our school houses are in districts that were sparsely settled when they were erected, but with the increase of population are now entirely hemmed in by tenement houses and factories. The buildings are old, and it seems like waste of money to make any attempt to remodel them. With the appointment by our present Mayor Strong of women inspectors, we hope with their co-operation to achieve further results.

The question of police matrons and municipal lodging houses has always been one of deep interest to us, and we have done our share by both legislative and personal effort towards these reforms. Before the appointment of matrons, all prisoners, both male and female, were cared for by the doorkeeper. There are at present about thirty matrons in our city station houses. Under our present Board of Police Commissioners a great change has been made in the system; all matrons before they receive their appointment must pass through a course of lectures given to them by the police surgeons, thus enabling them to tell the difference between intoxication and illness and to render assistance accordingly. When we realize what has been accomplished through this reform, we feel a great deal of satisfaction for all of the hard work done to effect it. We also rendered our assistance in the appointment of women as factory inspectors, and went several times to Albany in behalf of the passage of that bill, which is now such a success throughout the State.

The unsanitary habit of keeping cows shut up in stables in this city was a subject of consideration to us, especially as the poor animals were fed entirely on brewers' grains, and were kept in a filthy condition. After much efficient work of our committee we finally succeeded in having this nuisance abolished, and the cows removed from the city.

The unsanitary condition of the surface and elevated cars and the public buildings, in consequence of the vile habit of men and boys spitting over the floors, has given us much trouble, and we have appealed to presidents and managers of the roads time and time again to effect a reform. We could not see why men should indulge in such a vile practice, to the discomfort of women and children, and the danger of health to all. We took the matter to the Health Board and urged the necessity for action. After six weeks the Board took the subject in hand from a scientific standpoint, and after an investigation by their bacteriologists, Dr. Biggs and Dr. Prudden, they were convinced that something must be done.

The first idea was to try education by moral suasion. We had our doubts about this course, and in the early part of May were highly gratified to learn that the Board of Health had issued an ordinance prohibiting spitting on the floors of cars, ferry boats, public stations and public buildings, and ordered placards placed in all cars, both surface and elevated, and in all ferry houses and public buildings, calling the attention of the public to this ordinance.

Public baths, for winter as well as summer, have been given much thought by the Association, and we will be very happy when the Mayor's committee put the appropriation they have received for this purpose to practical use. The committee have been most efficient, and Dr.

Moreau Morris has given us a most valuable paper on this subject and the work they will accomplish, in which we will co-operate in every possible way. There is no greater education for the poor of our city than cleanliness, and we hope with these public baths and houses to see a marked improvement in the occupants of our tenement houses.

We have had a Committee on the Sanitary Inspection of Stores, and have co-operated with the Consumers' League to the extent that in their inspection of the stores all sanitary violations are reported to our Association and our committee takes immediate action. We are happy to say that the proprietors are always ready to receive our suggestions, and follow them as far as circumstances will allow. With the passage of the Rhinehardt Mercantile Bill, and the power in the hands of the Health Board, we feel this work will be done systematically and on business principles. We hope that the Board of Estimate and Apportionment will see the wisdom of a sufficient appropriation to allow the board to appoint at least a dozen inspectors, as the field is large and the work is great. We hope women will receive recognition in these appointments, and that those selected will be of the highest intelligence, possessing good judgment, for only such can be a credit to the department and give satisfaction to all they come in contact with.

The evils existing in bake shops, in their filthy condition, has lately been brought to our notice, and we rendered our assistance and co-operation for the passage of the bill by the last Legislature and also made our appeal to the Governor for his signature. The work in this line is too great to dwell on in this paper, and the field is a new one to us, but we shall take it up in the autumn, and know we shall succeed in having great improvements made in the sanitary condition of the bake shops, and feel that what we consume from day to day will be handled and prepared as it should be, in a cleanly manner, and not by overworked, careless men. We fully realize the necessity of immediate action of our Association and the co-operation by the Health Board by facts that have been brought to our notice.

We have succeeded in getting an ordinance passed by our Health Board prohibiting the exposure of meat and poultry which are hung on hooks before the retail butcher shops, and now it is entirely abolished. To-day no one realizes the benefit of this reform more than the butchers themselves, and many of them have expressed their thanks to us for it.

The tenement house problem has always been one of great consideration to us, and while we have done some work towards sanitary improvement it has only been a drop in the bucket. The field is too large for a small association having so many other lines of reform, and we now confine our efforts in co-operating with the Health Board and the Committee for Improved Housing of the Poor, and advising with them as to the best methods, etc. We know there is a great advance of thought along these lines, and a number of capitalists are now ready to build a large number of new houses with all improvements, and the Health Board in the line of march are ordering the demolition of very many of the old rookeries called rear tenements. Our latest work has been an investigation of the Alms House on Blackwell's Island, and we are confident of securing the much-needed improvements there, as there has been a large appropriation given by our Legislature for new buildings.

During our twelve years of work we have given attention to the Croton water and the milk supply, both of which now are well under control of the Health Board.

We have neglected nothing that tends toward the protection of public health. We hope to see a system of small parks established throughout our city, for the benefit of suffering children. We have also made an effort to have trees planted throughout our city, but under the old administration were told it could not be done, as they would not thrive, etc., and the expense was too great. I am happy to state that it can be done under our present Mayor, who has taken the chairmanship of the committee, and an association will be formed to begin this work at once, and we shall join it.

We are now hoping to effect, through the Health Board, a reform by which the exposure of green vegetables and fruits before the small grocery stores will be prohibited. The dust and dirt of our great city, the street sweepings, the shaking of mats from windows, etc., make it highly undesirable that any food should be openly exposed on the sidewalks. Fruits and vegetables decay more quickly when exposed to the air, and it is the practice of many grocers to sell the half-decayed and withered stuff to second-class customers at a reduced price. We should like the sale of sliced fruit prohibited ; the penny slices of musty melon and rotting pineapple only mean cholera infantum. We would like the sticks of candy, and the cocoanut in pans of water, both coated thick with dust, to be warned off our sidewalks, or else forced to be kept under a glass covering.

We have asked the co-operation of the Police Department, which has been promised us by President Roosevelt and his colleagues, and it is the first time in the history of this Association that we have received any recognition from that department. We held our first convention on the 14th and 15th of May. The physicians of the Academy of Medicine rented us their hall at a nominal price. Hon. W. J. Strong, Mayor of our city, presided, and on the platform were seated Hon. C. G. Wilson, President of the Health Board ; Hon. T. Roosevelt, President of our Police Board ; Hon. Col. Waring, Commissioner of our Street Department ; Dr. Moreau Morris, Vice-Chairman of the Mayor's Committee on Public Baths and Houses of Public Comfort—the heads of our municipality, all of whom delivered addresses. This recognition by all the heads of departments shows the victory we have won after twelve years of hard and ofttimes very discouraging labor.

In all of our efforts we have aimed at consistency, and have realized that where men have put all their capital and energy into the building up of a business, that even if the business was in itself a nuisance time must be given to effect reform, and that we must not demand of any one to tear down in a short time that which had taken years of labor to build up. We follow as much as possible the title of Charles Reade's great novel: "Put Yourself in His Place."

This brief outline of the twelve years of work of our Association will be in itself a reply to the many questions and letters we have received asking for information as to our work and our methods of doing it, and for those interested in the matter I would like to state that on February 24, 1891, we became so convinced of the importance of our work, that we sought and obtained a National charter, in addition to our State charter, and that there are no limits but those of human endurance to the good work we can do.

Under our present administration, with the heads of all the great departments willing to assist us, we feel so encouraged in our efforts that we wonder how any of our citizens allowed any other state of affairs. Cleanliness raises the moral standard, and with the aid of the officials mentioned, who have always given us the most valuable assistance, and the strongest of all aids, the press, to whom we express our thanks, our Empire City can be made what it ought to be—the greatest in the world.

(1) HEMORRHAGE FOLLOWING DILATATION OF URETHRAL STRICTURE. (2) PHYSICAL NON-DEVELOPMENT AT TWENTY-THREE. (3) REPORT OF ANOMALOUS CASES.*

BY I. N. BLOOM, A. B., M. D., LOUISVILLE, KY.,
Clinical Professor of Genito-Urinary Diseases in the University of Louisville; Dermatologist to the Louisville City Hospital, etc., Louisville, Kentucky.

I DESIRE to record the further observation of a case reported to this Society several months ago. At that time I made a few remarks against the operation of internal urethrotomy for the cure of urethral stricture, citing several cases, stating that I had always been satisfied, and had always obtained as good results by the dilatation method with sounds of various sizes; that I had frequently cured strictures that had been cut by other physicians and had returned, being even worse than before the cutting operation had been performed. I also spoke of the ease with which the dilatation process could be carried out, that I had never had any untoward results following this method; on several occasions I have seen a little fever, but this was of short duration. I then reported a case in which a patient came to me after having been treated by a physician in this city for gonorrhœa of twelve months' standing, with practically no result. The history was that as long as he used a certain injection the discharge assumed a watery condition or ceased althgether, but when injections were discontinued the discharge would return. I first passed a No. 20 French sound, olive point, and the stricture in the deep urethra allowed the passage of this sound with comparative ease. I next passed a No. 22, then a No. 23 and finally a No. 24 French sound with some difficulty and sent the patient away. I reported to the Society that he came back the next evening stating that after reaching home he had lost fully two quarts of blood from the urethra following the sound treatment. He had put some cotton over the penis before starting to my office, and when he arrived the cotton was so thoroughly saturated with blood that it weighed at least 1½ pounds; it was matted together with blood, which had also soaked through on his underclothing. I stated to him that it was the first case of this kind I had ever seen. I kept the man at home for two or three days, visited him once or twice in the mean time, but did not do anything further as to treatment for a week, when I again began the passage of sounds and have now gotten him up to No. 27 French. On several occasions since there has been a little bleeding after withdrawal of the sound, sometimes as much as a tablespoonful. I take the precaution to keep him in my office for half to three-quarters of an hour before allowing him to go away, to see if there is going to be any further hemorrhage.

The case impressed me as being rather peculiar, and a few days ago I asked him if there had ever been bleeding from any part of his body before. It had never occurred to me to ask questions on any of his former visits. He said yes, and then gave me the well-known history of all these cases, that he had a tooth pulled many years ago, and the gum bled for three or four days; he also said that he had received slight wounds at different times, all of which had bled a great deal. One wound he said was so superficial that he was surprised at its having bled so much. It then developed that the man belonged to the class of so-called "bleeders," so the accident that occurred to me was really probably very much more slight than one that would have occurred to any physician who might cut the stricture, which was located about five inches back of the meatus.

After making this statement of the case I want to ask the members of the Society for information, particularly as regards the literature of the subject. This is the first case of the kind that has come under my observation, and I am led to ask if they are common.

Case II.—Another case that I have in mind presents some unusual features. The patient is a young lady aged twenty-three years, parents very intelligent and reliable people. While this girl is twenty-three years old she is absolutely undeveloped physically; she has never menstruated, and there is no mammary development whatsoever. Intellectually she is equal, so I am told, to any girl of that age, and seems to be unusually bright. I would like to be referred to any literature that may be available on this subject; I have looked over several books upon the arrest of development, etc., from various causes, but am able to find nothing relating to absolute non-development such as presents in this case. Neither do I know of anything in the way of treatment for such a condition that would promise much. I ask for information on the subject, so as to get the benefit of the ablest assistance possible. Notwithstanding her age, and her development as regards stature and weight, her sexual organs are infantile. She has had no severe disease so far as I can learn, and there is no assignable cause for the lack of development. In looking over cases of acromegaly I find that some excellent results have been obtained in arrested development by the employment of thyroid feeding. Probably many of you have seen and read the work referred to. Whether such a course would be advisable in this case is questionable. It is a condition that I know practically nothing about, never having encountered another such a case, and would like to be referred to literature which will give some information on the subject.

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*Reported to the Louisville Clinical Society, by C. C. Mapes, Louisville, Ky.

Dr. Louis Frank: I am aware of no literature bearing upon the last case reported by Dr. Bloom, and really have nothing of importance to suggest. I have seen several cases of imperfect development. One case was seen with Dr. Leachman, and Dr. Weidner will remember another where the woman had no uterus or tubes at all. The vagina would barely admit the index finger, which passed up to what would be the normal hymen, and by a little force the two walls of the vagina separated, but the finger could scarcely find entrance. The woman was at that time forty years of age, single, with mammary development as perfect as we usually see. I saw another case of the same kind a few days ago. These cases, however, are unlike the one reported by Dr. Bloom, in that the women were otherwise well developed, and that they would come under the classification of imperfect development rather than non-development. I take it Dr. Bloom's case is simply an anomalous condition, and it is, so far as my reading goes, very rare.

Dr. I. N. Bloom: I was told that this girl on two or three occasions had spit blood, and the family physician had stated to the family that it was vicarious menstruation. But this has only occurred two or three times, and the girl is twenty-three years of age.

Dr. F. W. Samuel: In connection with Dr. Bloom's remarks I will briefly report a case that came under my observation recently. A woman consulted me, and upon examination I found that she had neither vagina nor uterus. She was married, and was markedly well developed in other directions, mammary glands large and well formed. Where the vagina would normally be there was a depression, perhaps an inch in depth, into which opened the urethra.

In regard to Dr. Bloom's first case, I have seen one case of bleeding from the urethra, following the cutting of a stricture. It would be hard to estimate the amount of blood lost, but it was considerable. It has always been my practice to dilate a urethral stricture; I have never advocated internal urethrotomy. Most modern authorities favor the method of dilatation rather than internal urethrotomy. If urethrotomy is indicated, I believe it would be better to do the external operation through the perineum. Certainly this is the better method; it is less dangerous, and the prospect of cure more favorable.

Dr. J. W. Irwin: I am very glad to have heard Dr. Bloom's report, and am more especially gratified that he should ask for information as to where he will likely find literature on the subject of non-development, as I would like to find and investigate such literature myself. I have never seen any classified literature on this subject, and do not know where it could be found. My belief is that his case is one of those anomalous things that we sometimes see in Nature. I know of nothing in the way of literature dealing strictly with the human being in this connection. It would be very interesting to know the cause of this peculiar lack of development of the sexual organs.

Dr. Bloom raises another important question, that of vicarious menstruation. I have met with a number of such cases, and cannot recall a single instance where I have seen vicarious menstruation occurring in a patient who was not fully developed both as to sexual organs and mammary glands. Most of them were rather stout, fleshy ladies. I recall at this time three or four such cases, and one of the ladies weighs 170 pounds and is fully developed in every way. She has, every three months, vicarious hemorrhage. She vomits blood or has a very profuse rectal hemorrhage. I have discovered no disorder of the rectum, and nothing to account for the hemorrhage, except that it occurs at the time when menstruation should take place. It occurs with much regularity, and from one to three pints of blood are discharged. I have under observation another case of hemorrhage from the rectum, less severe, of a vicarious character, occurring once every two, three or four months, and which comes on gradually and lasts a day or two. In another case vicarious hemorrhage from the inner canthus of both eyes occurs every twenty-eight days, and it has been going on in this way for sixteen years. Such disorders, so far as I know, belong to that indefinite class of cases known as neuroses, which furnish speculative material according to the imagination of the observer.

Dr. Carl Weidner: In regard to Dr. Bloom's second case: He will find a chapter on this subject in "Ziegler's Pathology," 1895 edition.

In this connection it may be permissible to report analogous cases. I will speak of a case that I saw in my earlier practice, perhaps ten years ago, in my clinical work at the college, and regret now that a more accurate history was not preserved. The patient was a colored woman who had a typical case of "vicarious menstruation" through the lungs, or from the bronchial passages, which occurred regularly every twenty-eight days, lasting from three to four days. She never had menstruated through the normal channel. I remember to have examined her at the time and found that she had an apparently normal vagina, but an undeveloped uterus, being about the thickness of my finger, and 1½ inches long, running transversely across the roof of the vagina. The ovaries were not to be felt at the time. Physically the woman was thoroughly developed. The most interesting point to me at the time was how this woman could live and not have some secondary trouble with the lungs from sepsis or other causes. How the case terminated I do not know, as she was lost sight of.

Dr. I. N. Bloom: There was nothing unusual in the first case, except the extent of the urethral hemorrhage, which was sufficient to be exceedingly alarming.

The second patient I will say is a girl, weighing seventy-five pounds, four feet ten inches in height, and gives evidence of being very bright intellectually. She writes stories for secular publications, and has a mind seemingly as strong as that of a grown woman. She is absolutely undeveloped sexually; there is not even a suspicion of hair on the pubes. She appears to be in perfect health, but the family have the presentiment that she will not live long, I suppose from the fact that she is undeveloped and twenty-three years of age.

Dr. J. M. Mathews: As this seems to be the proper time to report anomalous cases, I have a companion piece to the one mentioned by Dr. Samuel. He reports a case of a married woman without a semblance of a vagina. I reported to this Society some time ago the case of a married man without any semblance of a penis, with a urethra opening into the rectum. This man was normally developed in every other respect, but he was born without a penis.

Dr. W. C. Dugan: I would like to add one case. Not long ago a person was sent to me in a buggy. When the carriage drove up to my office, what appeared to be a woman alighted and walked up the pavement, taking strides, it seemed to me, about four feet in length. I went to the door myself and she (it?) asked if I were Dr. Dugan, in a very coarse, masculine voice. I asked if she were (it?) the patient sent to me by Dr. S., and she said she was. She was chewing wax, just as a woman is given to do, and I noticed in stepping out of the carriage she did not use the step at the side, but stepped out on the pavement, as men are in the habit of doing. She had been going around thinking she was a girl up to two years ago, when she found that she was not a girl. She said most of her companions had been girls, more girls than boys, and the doctor who sent her to me found she was a male. In his note he said there was no external evidence of a penis, and called my attention to the anomaly. By a careful examination I found there was a well defined penis, but it was ensheathed, along with the testes, in the scrotum. The scrotum is very poorly developed, and the testicles can be felt just over where the labia would normally be. While the testicles are well developed, they are rather small. That the penis is within the scrotum is certain, because it can be demonstrated by erections which take place. She (or he) told me that when the penis becomes erect it lifts up the scrotum just like could be done by slipping your finger into an empty sac and then extending it. In this way he has intercourse, taking the female on his lap, introducing this covered penis between the labiæ, the convexity upwards, and so indulges his passion. It is the most peculiar case I ever saw. It has been proposed to make an incision in the scrotum and liberate the penis, then uniting the cut scrotal walls, and with enough skin to cover it or else borrow skin from some part and make a covering for it. I hope to be able to show the patient to this Society before the operation is performed.

There are very few such cases reported. Some of our best works on anatomy make no mention of such an anomaly. Partial development of some part of the penis is not so rare.

Keyes, in speaking of "Absence of the Penis," on page 5 of his most excellent work on "Genito-Urinary Diseases and Syphilis," says: "A case of congenital absence of the penis has been observed by Nelaton. The scrotum was well developed and contained testicles. The child urinated through the rectum. Another similar case has been reported by Goschler. Revolut has still another case. Bouteillier reports an infant seemingly without penis. Under the skin above the scrotum a movable body was felt. This was liberated by incision and proved to be a rudimentary penis."

In many respects this is like the case I met with. But the penis in the patient I saw was fairly well developed, and was in the scrotum between the testes and rather more superficial. Along the course of the penis on lifting up scrotum were two small openings some distance apart, one near the end of penis, resembling somewhat a meatus, but this was a blind pouch. The other about the middle. smaller, though he told me it was the one he discharged his urine through. On close examination of the scrotum there was a small part (beneath which was located the glans penis) that had all the appearance of muco-cutaneous tissue; this was just above the opening I mentioned as resembling the meatus. The case is the most peculiar one so far reported, and I hope to make a more thorough report later, provided he submits to an operation. It was through the kindness ot Drs. Howard and Simpsan that I saw the case.

He was unable to give much information as to the ejaculations, further than that they were through the same opening mentioned.

Dr. Carl Weidner: I recently saw a case that is rather unusual as far as my experience goes: It is a case of vaginitis and vulvitis, with a purulent gonorrhœal discharge, in a baby four days old. The child is ill at the present time under my own care. The mother gave no history of disease; she was in good health before the delivery and has remained so since, so there was no apparent cause for the infection. The child will probably get well under proper management, by douches, etc., keeping the parts thoroughly disinfected. There was no accompanying infection of the eyes.

The Ohio Medical University has a department specially for midwives, the curriculum of study being similar to that in the training schools for nurses, but it is intended simply for midwives.

THE USE OF DRY SPONGES IN THE TOILET OF THE PERITONEUM.

By Homer I. Ostrom, M. D., New York.

ABDOMINAL surgery of the present day has for its keystone our recognition of the practicability of performing the toilet of the peritoneum. All other points of technique fall into insignificance before this one, for by means of it we are able to anticipate, and, in a measure, control, a chief source of danger attendant upon opening the abdominal cavity.

Let me state more clearly what I understand by "toilet of the peritoneum." I make it embrace all that part of abdominal surgery that looks toward an aseptic condition of the peritoneum.

It is evident that the steps which contribute to this end may be active or passive; that is to say, the principles of the peritoneal "toilet" may be obeyed by doing nothing—the peritoneum being clean—or the most active measures may be called for to accomplish the same end. Therefore, I say the object of this part of the technique of abdominal surgery being to leave the peritoneum clean, the technique includes non-interference as well as interference; absence of method as well as method.

And here let me say that the skill of the surgeon is exhibited quite as much in his knowledge when to operate as it is in his decision to invoke mechanical aid to assist the reparative powers of nature. In like measure the judgment of the surgeon which directs him to withhold his hand from manipulating the peritoneum, is quite as conducive to the success of his operation as the more active mechanical cleansing of the serous surfaces. I think many cases of abdominal surgery owe their complications and fatal issue to lack of judgment as to when to interfere and when not to interfere with the peritoneum.

Not every abdomen that is opened requires to be cleansed; indeed, comparatively few call for any toilet, for we must bear in mind that the peritoneum is healthy unless invaded by disease—synonymous in this instance with septic organisms—and that to the function of providing a lubricating surface the peritoneum adds that of a digesting organ. We will also remember that the protecting surface of this most extensive of serous membranes—its endothelial covering—is easily removed, and, when absent, leaves exposed the underlying structures, which favors absorption of any noxious material that may be present, or may subsequently gain access to the abdominal cavity.

In no department of surgery is routine of technique less indicated than in that which has to do with manipulation of the peritoneum, and in no department is intelligence, independent application of the general rules of operative surgery, more productive of good results than in abdominal surgery.

The point in the toilet of the peritoneum to which I in this place wish to direct especial attention, is the use of dry sponges. The ideal material for this purpose is the softest, most readily absorbing substance obtainable. But other qualities must be taken into consideration. Sea sponges meet the first requirements, but after one using, no process that their texture endures will render them surgically clean. If, therefore, we cannot use a fresh set of sponges for each operation—and here the question of expenditure must be considered—as aseptic surgeons we must discard natural sponges from our armamentarium. I have long since ceased to use them in my operations, and have substituted for them the sterilized gauze and cotton balls. These, of course, are used at only one operation.

My directions for their manufacture for use in my Private Hospital overcome the objections that have been urged against these sponges, especially for abdominal operations, namely, roughness of the gauze, and liability of shedding threads of lint, to be left in the abdominal cavity.

Cheese cloth of medium quality is boiled for one hour to insure removal of all dressing, and to render it aseptic. This is then cut in disks of six inches diameter. A gathering string is run around the disk sufficiently far from its edge to permit of the edge being turned in when the string is tightened. Before tightening the string a piece of absorbent cotton of the size required for the completed sponge, is placed in the gauze. The string is then tightened and secured. The sponges thus made are sterilized, and not removed from the sterilizing tubes until required for use.

While the toilet of the peritoneum frequently includes the use of water, I believe this to be an unfortunate necessity, and one that is resorted to oftener than is required.

As I have before said, the endothelial covering of the peritoneum is exceedingly delicate, and easily removed. I have also referred to the results that may follow such denudation, and I cannot but believe that the routine practice of flushing the abdominal cavity with quantities of water—some surgeons seem to attach a degree of glory to the number of gallons used—is injurious, and conducive to traumatism of the peritoneum. Some cases require this cleansing; when there is reason to believe that pus has escaped and lies in the interstices of the abdominal cavity, no other means will suffice for its removal. Indeed, it may then be necessary to pour peroxide of hydrogen into the abdomen, as I have frequently done, but I never introduce any fluid into the abdomen unless absolutely necessary, and then always under a mental protest and a careful balancing of the advantages of removing every particle of noxious material, against the disadvantages of injuring the peritoneum in hitherto intact regions, the consequent forming of absorbing areas, and the formation of adhering surfaces between abdominal and pelvic viscera.

The peritoneum is a kind servant but a cruel master, and while it will bear an astonishing degree of manipulation when the alternative is septic absorption, it will resent audacious and unnecessary handling.

Let me not be misunderstood; to avert the greatest evil of abdominal surgery—septic peritonitis—I hesitate at no measures, however heroic, to control this terror of the laparotomist. Even if I knew that the means I adopted would deprive the viscera of a considerable portion of peritoneum, such a result I regard as insignificant in face of the greater evil, for I feel more confidence in the resources of our art to meet such a condition than to control septic poisoning. But I believe a large proportion of laparotomies do not require irrigating any more than they require drainage, neither do they require sponging, and when sponges are used they should be used dry.

Water introduced into the abdominal cavity, even that in a squeezed sponge, is one more element of danger. Moreover, a squeezed gauze sponge does not absorb as readily as a dry one, and requires to be pressed with more force to effect the removal of the foreign material. Hence, for all ordinary purposes, when it is necessary to make a toilet of the peritoneum, I employ dry sponges, carried with care to the region it is desired to cleanse. Blood, blood clots, even limited pus focii, can thus be removed with a minimum risk of denuding the peritoneum, without rendering more absorbable the materials to be removed; thus their passage to remote portions of the abdomen, otherwise secure from invasion, is guarded against.

Even what we call bad pus cases may frequently be operated on without irrigating or flushing; in other words, can be completed as dry operations, by care in shutting off the peritoneal cavity with aseptic pads and sponges. Desperate cases are thus converted into comparatively safe ones, through truly conservative technique. Audacious and showy methods give place to skillful and scientific procedures, greatly, as may be anticipated, to the advantage of the patient, and assuredly to the credit of the surgeon.

ANTISEPTIC TREATMENT OF BURNS.*

By J. Hubley Schall, M.D., New York.

EXCEPTIONAL opportunities have been afforded me in hospital practice of observing the management of different degrees of burns, as has been suggested, as a result of a personal experience covering about fifty cases.

The method of treatment pursued is somewhat out of the usual course, more difficult to practice, and, judging from results obtained, superior to that of any method in vogue to which my attenion has been called.

Dr. Martin, of the University of Pennsylvania, divides burns into six degrees, as follows:

First degree: Simple erythemia, with no tissue destruction.

Second degree: Vesication with destruction of the superficial layers.

Third degree: Destruction of the epiderm and greater part of the true skin.

Fourth degree: Destruction of the true skin and subcutaneous tissues.

Fifth degree: The deep facia is penetrated and the muscles are involved.

Sixth degree: Destruction of the entire part.

Treatment: In burns that are extensive, and in which the patient is suffering from extreme shock, after carefully removing the clothing, I make a direct application of crude petroleum to the burnt surface; later, the patient is immersed in a warm bath of bicarbonate of soda, and is kept there until the pulse and temperature improve.

If the burns be of the first or second degree, a dressing of gauze, saturated with bicarbonate of soda, is applied, and covered with oiled muslin. This dressing is allowed to remain until it becomes dry, or from twenty-four to forty-eight hours; it is then removed and another similar dressing applied. This treatment is continued until the patient has entirely recovered.

The technique of treatment employed by me in all other burns is based on strict antiseptic principles, and is best shown in the history of the following case:

Daniel C., age twenty-nine years, was admitted to the hospital on the morning of July 19th suffering untold agony from burns about the face and neck, the superior portion of the chest, both arms, the left thigh and the back from the scapulæ to the crest of the ilia, the degree varying from the 1st to the 4th.

After the usual preliminary treatment, the patient was anæsthetized and the entire burnt surface thoroughly washed with a weak solution of bichloride, 1-4000, shaved and purified. By "purifying" I mean securing the most antiseptic cleansing of the entire surface, every shred being removed by shaving and the use of curved scissors.

Having freed the surface from all charred tissue, which is an excellent soil for the rapid production of the streptococcus pyogenus, the entire area was freely irrigated with a solution of bichloride, 1-4000, then lightly dusted with a powder composed of iodoform one part, to six parts of boracic acid. The surface was then covered with aseptic, perforated oiled silk, and over this was applied a layer of iodoform, bichloride and sterilized gauze, finally sterilized cotton and a snugly fitting bandage. The arms were retained in straight splints during the entire treatment.

The temperature, the night after admission, was 101°; the pulse strong but rapid. At times the patient was delirious, and cried almost constantly for water until the following morning, when he became quiet and slept for five hours. Up to the fourth day the temperature ranged from 99.2° to 101.8°, when he developed a violent gastro-intestinal catarrh. Nux-vomica was given, with the result of clearing up this condition by the evening of the sixth day. The gastro-intestinal condition subsiding, the kidneys became involved, the urinary secretions amounting to less than nine ounces in twenty-four hours. Cantharis was clearly indicated, and prescribed with the desired effect.

On the morning of the sixth day the arms and face were redressed, there being no signs of suppuration. On the following morning the remaining parts were redressed with the above results. Up to the twenty-first day, the time of his discharge, the patient's recovery was rapid and uneventful. On leaving the hospital nothing could be noticed but a slight erythema of the back and arms; the face and neck were free from any blemish whatever.

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* Read before the Kings County Medical Society, May, 1895.

The success of this treatment depends upon the proper and thorough antiseptic character of the first dressing, the coagulation of the albuminous discharges from the raw surfaces, and the avoidance of puncturing the membrane that forms, due to the bichloride on the albuminous discharges.

Throughout the entire treatment the case was redressed four times, and the patient experienced little or no pain twenty-four hours after the first dressing was applied.

Some claim that suppuration cannot be prevented in the treatment of burns. It is my belief that if strict antisepsis is carried out, and sound judgment displayed in regard to the time of redressing, suppuration would never occur.

In redressing extensive burns an anæsthetic should be used. I have found, especially in these cases, that the oxygenated chloroform is the ideal anæsthetic.

If properly administered it is comparatively safe where other anæsthetics, on account of the shock they produce, are contra-indicated.

In all severe cases of burns I anticipate nephritic complications, so it is my custom to start early with the free use of milk, vichy and Poland water. By frequently flushing the kidneys and functionally assisting the eliminating organs, less trouble from deficient renal action follows.

In summarizing I would mention the following advantages of this treatment:

First: Infrequency of redressing.
Second: Diminished pain after its application.
Third: Freedom from odor.
Fourth: Rapid regeneration of tissue.

CLINIQUE.

EXTRA-UTERINE PREGNANCY.*

By J. W. Irwin, M. D., Louisville, Ky.

SEVEN weeks ago I was hurriedly called after midnight to see Mrs. X. I found her suffering a great deal of pain, with a temperature subnormal, and bathed in a cold perspiration, at the same time complaining of rigors. She was very pale, considerably emaciated, respiration hurried, pulse small and 140 to the minute. Axillary temperature 97° Fahr. The condition of the patient looked quite alarming. I made a physical examination, such as I could make at that hour of the night, and came to the conclusion that there was pus forming, or that pus had formed in the cavity of the abdomen. I administered such remedies as would afford relief, and on the following morning made a local examination per vaginam. The history was that the lady had not menstruated for the preceding two months, and before development of the alarming symptoms I have mentioned she had suffered much pain in the pelvis, chiefly in the region of the right ovary. She had pain in her back, in the loins, there was tympanites, the abdomen being greatly distended with gas. She could not void her urine voluntarily.

I learned that she had been sick for six or seven weeks previously, suffering intense pain in the abdomen, referred chiefly to the right side. The pain came on suddenly and was attended by pallor and prostration. I found she could not have a movement from the bowels, which gave rise to the fear that there might be intussusception. The patient was vomiting when I first saw her large quantities of green mucus, not bile, containing small particles of fæcal matter, with a distinct fæcal odor. On the following morning I found a large protrusion extending low into Douglas' cul de sac. The uterus was entirely immovable, the pelvic structures seemed to be agglutinated, so that there was no motion of the uterus in any direction. Pressure seemed to be so great on the rectum that when I tried to introduce a rectal bougie it would not go over one inch above the internal sphincter. The mass low in the pelvis appeared to be soft, and evidences of sepsis were present, with a jaundiced hue of the skin. There was no color in her lips; she seemed to be almost exsanguinated. I advised an immediate operation, which was done a few hours afterward, and a large quantity of pus, broken down tissue, and dark blood clots were evacuated through Douglas' cul de sac. The clinical evidences of an extra-uterine pregnancy were present. The patient lay in a state between life and death, so to speak, for several days, but gradually her health improved, and to-day, seven weeks since the operation, she was able to come to my office, having gained enough strength to walk with ease over a mile. The uterus is freely movable and the fluctuating mass has entirely disappeared, so too have the evidences of ectopic pregnancy that seemed to have occurred in the right ovary.

The case was interesting, in view of the fact that she had been attended by skillful physicians, as far as I could learn, and the error in diagnosis almost cost her life. I think the error came about largely from the fact that no local examination had been made. It appears that all the senses were not employed by the physicians in this case, and had the patient died I am very much inclined to believe that death would have been attributed by those in attendance previously to intussusception of the bowels.

Dr. Wathen did the operation, and attended to the surgical part of the work subsequently, and the result in the case is particularly favorable.

DISCUSSION.

Dr. Carl Weidner: Dr. Irwin certainly draws a very valuable and practical deduction in speaking of this case. We can never be too careful in examining our patients. Had this woman been properly examined it is very likely some attention would have been drawn to trouble within the abdomen or pelvis to account for the condition in which he found her. I was recently called to see a woman, who gave the history of having been bleeding from the uterus for three months. She had had a baby three months before that. I naturally thought I had to deal with a case of retained membranes, which had given rise to the repeated hemorrhages. The family positively did not want the physician who had been in attendance, and after this statement I consented to treat the woman, and proceeded to make an examination. I found, not what I had expected, but to my great surprise I found the vagina almost filled with a large neoplasm. The tumor seemed to be made up principally of the uterus itself. It was a ragged, readily bleeding, irregular mass, extending backwards toward the rectum and forward toward the bladder. The stench was so tremendous as to be almost unendurable. In other words, without further examination, I think no one would have hesitated in pronouncing it a typical case of carcinoma. The woman had been bleeding for three months; some physician had seen her a month previously, but he had never examined her as to the cause of the bleeding, and consequently overlooked the condition entirely. I told the family I wanted some one else to see the patient, and two physicians have seen her since, and each independently came to the same conclusion—that the woman was on the verge of death from malignant disease. This case is to show the importance of making a thorough examination of every case brought before us.

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*Reported to the Louisville Clinical Society by C. C. Mapes, Louisville, Ky.

Dr. W. H. Wathen: I feel that I can add nothing to the description of the case as detailed by Dr. Irwin. When I saw the woman I realized that she was in a very critical condition, and upon examination confirmed in every particular the diagnosis that Dr. Irwin had made. In fact, I do not understand how any one who would study the case could have failed to make an examination, and when the examination was made, and the history of the case considered, the diagnosis of ruptured extra-uterine pregnancy with the usual results following after this length of time were evident. The patient was in such a precarious condition that to have attempted a suprapubic operation would have been bad surgery, because I think she would have died of shock. Within one and one-half hours after I was called in consultation, we operated through the posterior vaginal fornix, removing the contents as described by Dr. Irwin—pus mixed with clotted, decomposed blood. The woman had no shock after the operation. In a few hours afterward she was in every way much better; very soon gas passed freely, and the next day the bowels moved, and, though very weak for a while, she continued gradually to improve, until to-day she was able to call upon Dr. Irwin at his office. I have not seen her for probably a month. There is a great deal of this kind of work that could be done per vaginam without endangering the life of the woman, to the same extent as would be done were we to attempt to approach the pathological condition in the pelvis through the abdomen. I think many of these cases can be cured permanently by drainage through the vagina without much danger to life, and even if they cannot be cured the immediate symptoms can be relieved, and the patient will regain strength enough to resist a radical operation later. The treatment of the case by Dr. Irwin has resulted even more favorably than I anticipated, and there will probably be no further operative measures at any time indicated.

Dr. Louis Frank: I am led to ask if there were any further evidences than clotted blood as indicative of an extra-uterine pregnancy in this case, and if a microscopical examination has been made to determine positively the nature of the condition?

Dr. J. W. Irwin: No microscopical investigation was made, but the clinical history of the case and all the obtainable facts seemed to indicate the condition was one of extra-uterine pregnancy; the very fact that she had not menstruated for two months led me to that opinion, also the fact that the trouble came on suddenly, and seemed to be confined to one ovary. The amount of fluid discharged at the operation was about three pints; possibly one-third of it was broken-down black blood, very fetid and evidently much decomposed. The bowels acted well without medication the next day after the operation, and she felt greatly relieved. The actions have occurred regularly ever since. She menstruated seven days ago. The flow lasted five days, and was normal in every respect. The wound in the cul de sac has entirely healed; there is no leucorrhœal discharge, no discomfort about the pelvis, and the uterus is freely movable.

Dr. W. H. Wathen: I purposely avoided going into the history of the case, as it was reported by Dr. Irwin, but there is no way, so far as I can see, to account for the condition found, except that it is an extra-uterine pregnancy. Here was a woman, a typical specimen of good health, so far as her general condition was concerned. She had good nutrition, rich blood, was well formed, muscular, and active, always regular in her menstruation; had not been pregnant for several years, had missed her period twice, had not exposed herself during this time to anything that would prevent menstruation. She suddenly had intense pain in the right side, there was evidence of great shock, she became pallid, showing loss of blood, was taken home, and partially recovered from the shock, finally having a relapse of the trouble, then gradually continued to grow worse, until decomposition began and sepsis was established. Now, in the operation the conditions found were such that we seldom find from any other cause than extra-uterine pregnancy. It is seldom that we have a pelvic hematocele filling the entire pelvis, except as a result of extra-uterine pregnancy. These cases were originally believed to be the result of the rupture of a vessel, caused by congestion during the monthly period, or at other times from the same condition of these structures. But this is found now almost universally not true, and while we cannot find in all cases decidual membranes, chorionic or placental villi, we can nevertheless arrive at an approximately correct diagnosis of extra-uterine pregnancy by the direct symptoms and by exclusion. I found in this case that the ovary upon the right side was enlarged apparently about the size we would have at this time of pregnancy caused by a corpus luteum. It is impossible for me to believe that there could have been a mistake in the diagnosis.

Dr. P. Gunterman: The following case is not of much importance, but I will report it, for the reason that I desire to contradict a few things Dr. Weidner has said, I was called to see a young woman five weeks ago, and delivered her of a baby seven months old which had been dead about a month according to her calculation. The delivery was proper, normal and right, and while the child was dead it was not decomposed, the amnion was sweet, there was no odor about it, the delivery was accomplished without injury, and the woman made a good recovery. Within ten days she was attending to her domestic duties; anyway she was up about the house in perhaps a week after delivery. I should say the lochia was normal and proper and stopped in due time. About ten days after the delivery she had a slight discharge from the uterus; in two or three days that ceased and she was perfectly well. Three weeks after delivery of the child the woman was taken ill. I had known her for twenty years, was aware that she was very nervous, and when she complained I thought it was nothing but a period of hysteria. She trembled all over, her muscles would jerk or jump, you could feel and see it; she had a normal temperature and normal pulse; this state of affairs continued for three or four days; meantime there was a slight discharge from the vagina, which seemed to become more persistent because of the nervous trouble, and I called my friend Dr. Satterwhite in consultation. I explained to him that she was a very nervous woman. We saw her together on two consecutive days: on the third morning we accidently found out what was the matter. She had these nervous muscular twitchings, she also had a cough; it was not exactly a cough but she said there was a feeling of distress about the chest, a choking sensation, she could not move her head, she could not move her arms without experiencing the feeling that they would drop off, etc. The third morning, when we called to see her, she said: "Doctor, last night, all of a sudden, I took a very severe pain in my left knee, the knee became swollen, and I could not step on the ground." We came to the conclusion that it was a case of rheumatism and put her upon anti-rheumatic treatment, which in due time relieved all her symptoms.

The point I wish to make is this, that it is not always right, that it is not always proper, to examine a woman every time and all the time because there may be a little bleeding or a slight discharge from the vagina; if the woman has been properly delivered, if the afterbirth has been taken away or comes away properly, and we can judge with reasonable accuracy that everything is all right, I do not think we have any business to insert a finger into the vagina. Very often—I would not hesitate to say once out of three times—we find that a woman that has been properly delivered will have a little discharge from the vagina after the regular flow for a month or two, or for several weeks, but this does not justify us in making a thorough examination after the woman has been properly delivered.

The case Dr. Weidner has reported is exceptional and unfortunate, but no man had any reason to believe there was any serious trouble, and certainly had no business to make a thorough examination unless there were sufficient other evidences to justify it. If delivery was properly accomplished, if the afterbirth and secundines came away completely and thoroughly—and I think every man that delivers a woman ought to see that the secundines come away properly before leaving the case; if he does not he is guilty of neglect—if he knows that the secundines have come away, every part of the membranes have been delivered rightly and properly, I do not think that a little bleeding or a little discharge for six or eight weeks even is any indication at all that a man ought to make any further physical examination.

Dr. J. W. Irwin: I made some reference to the fact, in reporting my case, which brought out some remarks by Dr. Weidner, that an error seemed to have been committed in not making a diagnosis, that a thorough investigation of the case had not been made to establish the cause of this patient's trouble. This seems to have brought about a misunderstanding between my friends, Dr. Guntermann and Dr. Weidner, in view of the statements the latter has made in support of mine. Now, I am very much inclined to believe, and I think I can speak impartially, that Dr. Guntermann has not established a single point at variance with the statements made by either Dr. Weidner or myself. The whole question narrows itself down to this fact, that the apparent necessities of every case should govern the physician in his investigations. I do not think, however, that Dr. Guntermann, although his remarks are very conservative, and I know they are sincere, fully realizes the dangerous statements which he has made. Why should physicians not make examinations per vaginam three or four, or even one day after delivery, if there is anything which in their opinion calls for it? Cannot the hand be rendered aseptic? Is it not possible to do such a thing without pain? Most assuredly it is. I say then, it is neglect of duty, where there is any indication pointing to the fact that there may be something going on the exact nature of which the attending physician may not be aware, if he does not thoroughly and fully investigate it. It is the duty of every physician to thoroughly investigate his case. We know the lochial discharge after the birth of a male child will, under normal conditions last for a certain length of time; we know it will last after the birth of a female child perhaps longer; we know that some mothers will have a discharge that will last much longer than others; we know there are conditions of the system which will cause it to last longer; we know there are conditions of labor which will bring about certain changes in the uterus; we know there are certain forms of leucorrhœa which may remain for some time and keep up a vaginal discharge. Taking all these facts into consideration, if we believe an investigation would aid us in removing the cause of the trouble, I can see no reason why we should not make a thorough examination under the conditions which intelligent therapeutics have brought to our aid. Furthermore, I think the statements made by Dr. Guntermann are ill-advised. Notwithstanding the fact that I know his sincerity, I know his ability in this branch of medicine and I know his hesitancy in examining mothers unnecessarily, yet I believe in all cases where we have reason to doubt the nature of the disease we are not doing our duty unless we make a thorough investigation. I think forensic medicine would hold us responsible for neglect of duty. We are not only responsible for sins of commission in forensic medicine, but we are responsible for sins of omission, and I may say sins of omission very much oftener than sins of commission.

Dr. J. M. Krim: I cannot conceive what harm can come of a physician making a physical examination of a woman even the first or second day after labor. He knows perfectly well if he has delivered her—at least he ought to know—that everything is all right. We know that if the child has been properly delivered without injury to the mother that the secundines will come away promptly. It stands to reason also if labor has been unduly prolonged that there may be some bruising of the soft parts of the pelvis which may prolong oozing, but if this oozing continues beyond a certain period it ought to be investigated. A local discharge ought not to continue longer than two weeks unless there is some unusual condition existing, a lacerated cervix or a tear in the perineum, etc. I fear that we often neglect making a thorough examination in cases of this kind. In the case Dr. Weidner has reported, if a thorough investigation had been made after labor, the woman might have been saved the ravages of malignant disease. I can cite a case similar to the one reported by Dr. Weidner, where if a thorough examination had been made following delivery the life of the patient might have been saved. She was delivered last July by a midwife, and developed some months later a carcinoma of the cervix. She was the mother of five children, this being the sixth. The child weighed six pounds. The same midwife had delivered her in a confinement ten or twelve months previously. When I was called I was told that the patient had been bleeding for four months. It required only a superficial examination to reveal the condition. Dr. Wathen saw the case and curetted the uterus, removing all the diseased tissue that was possible, and if the woman had been carefully examined prior to that time, before the rectum and bladder became involved in the cancerous process, she might have been saved by doing a hysterectomy. In the unfortunate condition in which Dr. Wathen found her he could advise nothing except a thorough curetting, and this is all that was done. Temporary relief was afforded by this procedure, bleeding became less, but she is now in a worse condition than before; in fact, she is dying from the extension of the cancerous processes.

Dr. Carl Weidner: I would like to record an additional statement in connection with the case I briefly reported: The case was exceptional in this respect, that the woman is only twenty-five years of age. She had not been examined since the labor, which occurred three months previously.

Dr. P. Guntermann: I do not mean to say that any case which presents evidences of disease ought to be examined. But I repeat *that any case that has been properly delivered and treated, and only shows some little irregularities in getting well, is not one that ought to be subjected to severe examination.*

ENORMOUS GALL-STONE.*

By A. Morgan Cartledge, M. D., Louisville, Ky.

Professor of the Principles and Practice of Surgery and Clinical Surgery in the Louisville Medical College, etc., Louisville, Ky.

THE specimen which I shall presently exhibit has quite a remarkable history, and I will briefly give it in detail. Fifteen days ago I received a letter from a physician in the interior of the State, saying that he had a patient that was suffering from gall-stones. He gave me a complete history of the case, and I agreed with him that the diagnosis was probably correct.

The patient came to this city for operation seven days ago. I examined her in my office on Monday morning, and found a tumor occupying the right side of the abdomen as low down as the umbilicus, which I made out to be the liver; I was quite satisfied that it was the liver, as there was the normal liver dullness, and the tumor had every appearance of being the liver upon examination.

The history was that four months ago the patient, in lifting something which was very heavy, was seized with severe pain in the right side, just below the border of the ribs, which lasted without intermission until a physician was called, about a week afterward. At this time a tumor was easily recognized, which, as she expressed it, would come and go at intervals. She gave a typical history of distended gall bladder with collapse of the contents, with the probability of obstruction from a calculus.

Four or five weeks ago this tumor developed. After she came under the observation of the doctor who wrote me concerning the case, he said her highest temperature was 103° Fahr.; she had great emaciation, rapid and feeble pulse. Her pulse was 120 to 130 when she came to this city; I operated the next day after her arrival; making a free incision I found that the tumor which had been felt was the liver, occupying the position that I show you. Running along the lower border of the liver was the transverse colon. Deep underneath the right lobe of the liver, extending quite far back and well covered by the liver, was a mass as large as my fist, the omentum, transverse colon and lower border of the liver being quite firmly attached to it. This mass when first manipulated gave the appearance of being cancerous, but the disposition of dense adhesions led me to believe that it was inflammatory and not cancerous. I isolated what I thought was the region of the gall bladder, the notch of the liver, but the adhesions were so dense that dissection could not be proceeded with; it was impossible to press the finger between the notch of the liver, which was pushed far to the right, the liver being displaced downward. With the idea that the trouble was inflammatory I suggested aspiration of the tumor, which could be plainly felt, through the lower margin of the liver, to evacuate the pus. The needle when introduced passed in fully two and one-half inches, when pus was found. I then rapidly packed gauze around the field of operation, and made a free incision into the liver and evacuated about five ounces of pus from the tumor on the under side of the liver. I inserted a tube and irrigated the cavity until the fluid came away clear, then passed another drainage-tube through the wound down into the sac, packed gauze around it and closed the opening.

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*Reported to the Louisville Surgical Society, by C. C. Mapes, Louisville, Ky.

The patient has had no untoward symptoms. The pulse has diminished in frequency; the liver has commenced to assume its normal position and size, and her temperature has been reduced to normal; pulse yesterday, 84. The wound has been dressed and repacked every day since the operation, a week ago. In repacking the wound yesterday I detected a hard substance down at the bottom of the sac, which felt to the touch of the probe like a calculus, certainly a foreign body of some kind. To-day I removed the stitches, and, breaking up enough of the plastic union which had taken place to introduce my finger, I carried it down through the opening in the liver until I could feel the specimen which I will presently exhibit. I enlarged the opening in the liver by gentle dilatation until I reached the sac, and removed this enormous calculus that I now show you. Of course it was necessary to give the patient chloroform in order to accomplish removal. It is the largest gall stone that I have ever removed, and the largest one that I have ever seen, being the size of a small hen's egg.

A CURE FOR COLDS.

Schnee suggests percussing the terminal branches of the nerves supplying the mucous membrane of the nose with a small hammer made of india rubber, the slight shocks having the effect of contracting the blood vessels. The location proposed is the forehead, just above the root of the nose, extending outward over the eyebrows. The primary result is to increase secretion. Chronic nasal catarrh may also be treated in this manner, but requires heavier treatment more prolonged.

There is only one sudden death among women to eight among men.

AMPUTATION AT THE HIP BY THE WYETH METHOD.*

By H. Horace Grant, M. D., Louisville, Ky.

Professor of Surgery and Clinical Surgery in the Hospital College of Medicine, etc., Louisville, Ky.

I PRESENT for your examination a photograph of an enchondroma of the knee joint, removed from a woman aged thirty-two years, the growth having undergone sarcomatous degeneration. Microscopical examination showed extensive cartilaginous deposits, with spindle cells of sarcoma scattered all through the tumor. The growth began in the knee joint four years ago, but within the last year had grown very rapidly. The leg was amputated at the hip joint by the Wyeth method. The leg weighed sixty-five pounds after the operation. The tumor extended up upon the bony structures entirely up to the hip joint. All muscular structures as high up as they were attached to the femur were more or less involved, and in making the amputation it was practically impossible to get away all the diseased tissue, that is all the structure that showed evidences of sarcomatous involvement. The operation was done after the method suggested by Wyeth; time required in its accomplishment, thirty-five minutes. The woman was septic at the time of the operation, pulse 130 to the minute, temperature, 101° Fahr. The day after the operation, when the first dressings were removed, they were shown to be somewhat offensive, and in four or five days there was quite a discharge at the corner of the wound which was left for drainage. This discharge was evidently due to a sloughing of some of the diseased material which it was impossible to get away. The woman, however has done remarkably well, her temperature now being normal, pulse 110. The most interesting feature about the case is that now, three weeks after the extensive operation for the most malignant form of sarcoma, the woman seems to be perfectly well. The wound looks unusually healthy and has almost completely closed, and she has a fair chance of complete recovery from the disease. Ulceration had taken place, and the patient had been septic for three or four months before the operation.

A HOT BATH WILL BRING SLEEP.

Suppose a person to be tired out by overwork of any kind, to feel nervous, irritable and worn, to be absolutely certain that bed means only tossing for hours in an unhappy wakefulness. We all know this condition of the body and mind. Turn on the hot water in the bathroom and soak in the hot bath until the drowsy feeling comes, which will be within three minutes; rub yourself briskly with a coarse Turkish towel until the body is perfectly dry, and then go to bed. You will sleep the sleep of the just, and rise in the morning wondering how you could have felt so badly the night before. The bath has saved many a one from a sleepless night, if not from a severe headache the next day.—*Dr. Cyrus Edson, in June Ladies' Home Journal.*

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* Reported to the Louisville Surgical Society, by C. C. Mapes, Louisville, Ky.

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A TREATISE ON APPENDICITIS. By John B. Deaver, M. D., containing thirty-two full page plates and other illustrations. Philadelphia: P. Blakiston, Son & Co., 1896.

The author, in his preface, says: "It has been my desire to present in this volume such a systematic study of the disease that not only the usual symptoms may be traced from their inception to their termination, but also that the various anomalous conditions, so frequently met with, may be recognized with equal facility. I have therefore endeavored to emphasize the etiology, symptomatology, and special technique in the operative treatment." The five hundred cases which have passed under the care of the author have evidently been carefully studied. The volume is one of the most beautiful specimens of bookmaking we have ever seen.

LEA BROTHERS & CO. announce the publication, September 1st, of a revised edition of "Gray's Anatomy."

In this new edition every page has received the careful scrutiny of a corps of eminent American anatomists, and such changes have been made as are necessary to represent the advances in anatomical knowledge and in methods of teaching, since the recent issuance of the thirteenth edition. The section on the brain, spinal cord and viscera has been entirely rewritten, and the new matter added throughout will increase the work by about seventy-five pages.

Not less important is the addition of about 135 new and handsome engravings, enriching and completing the unrivalled series of illustrations which have always formed a distinguishing feature of this work. As heretofore, distinctive colors have been used to give greater prominence to the attachments of muscles, and to veins, arteries and nerves. There has been no increase in price.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thomas L. Stedman, M.D., New York City. In twenty volumes. Volume VIII., "Diseases of the Digestive Organs." New York: William Wood & Co., 1896.

Volume VIII. is issued out of the regular order, and will be followed by Vol. VII. The present volume has been prepared by eight different authors, four American and four German.

Diseases of the Mouth, by two German authors, Johann Mikielicz and Werner Kummel, occupies seventy-eight pages. Both authors occupy prominent positions in the University of Breslau.

Diseases of the Æsophagus, eighteen pages, by Prof. Fitz, of Harvard.

Diseases of the Stomach, by Prof. Max Einhorn, of the Post Graduate School in this city, covers 212 pages, and is one of the clearest and most scientific, as well as practical, presentations of the subjects discussed we have seen.

This treatise alone, if bound in a book by itself, would be amply worth the price of the entire volume.

Prof. Curtis, of the Post Graduate School and the Cancer Hospital, devotes 100 pages to Diseases of the Peritoneum, presenting very clearly the recent advances made in diagnosis and treatment.

Animal Parasites and Their Treatment, are given by Prof. Huber, of Bavaria, and Prof. French, of Cincinnati.

The eighth volume fully maintains the reputation of the preceding volumes for scientific accuracy, representing the most advanced thought of our profession.

Dr. H. I. Ostrom will reopen his private hospital, 127 West Forty-seventh street, October 1, 1896. This hospital is one of the best appointed private hospitals in this city, if not in the world, and we have no doubt will show the coming year the almost phenomenal success of the past year.

CORRESPONDENCE.

"THE SEXUAL FUNCTION" IN CALIFORNIA.

To the Editors of the NEW YORK MEDICAL TIMES:

Homœopathic journalistic literature is nothing if not *sui generis*. The reason is not far to seek. It used to be thought that "the mob of gentlemen who write with ease" invariably became Homœopathic editors (the *Minneapolis Homœopathic Magazine* being the exception that proves the rule). This explains much, and the inventive genius that characterizes the nineteenth century does the rest. Cavilling doubters denied Carlyle's assertion that with sundry bits of wood and leather the Nuremberg toy makers could manufacture a better preacher than the college-made article, but there remains little room for doubt when a few feet of gas piping suffice to make a Homœopathic editor. The marvel grows sensibly less if you remember that a pair of scissors and a paste pot have made many a Homœopathic author. It is respectfully submitted that the *Medical Century* demonstrates this origin of both editor and author. But its proud preeminence is challenged by a suckling in the Occident, and the *Century* must look to its laurels. "Now all the world's mine oyster" was its boastful declaration at the last meeting of the Institute, but who cares for oysters in June! Yes, the *Century* is slain, and the jaw-bone that did the deed is a paper on "The Sexual Function," by an expert. This particular specimen of Homœopathic journalistic literature is just an orgasm of salacity, in the frenzy of which its victim confounds *function* with *passion*. The sexual function, it may be observed in passing, is the supreme and universal endowment of all organic life, and its purpose is the perpetuation of species; the sexual passion is the incentive to the exercise of the function. (This simple distinction is made solely for the benefit of the Occidental editor.)

Our editor who writes with such fatal ease uses the term "sexual life" with a looseness characteristic of his species. He maunders to this effect: "The question arises as to the legitimate aim and special object of sexual power and sexual life. A seemingly easy reply is found in the imperious demand for the propogation of the human race. * * * The only question which may be raised is whether or not this is the *only* purpose of the sexual embrace." Having thus determined that, with him, *sexual life* and *sexual embrace* are equivalents, we will now apply his meaning to his *dicta*: "It is calamitous to teach that the one object of the sexual embrace centers in the propagation of the race." An "object" *centering in* is gas pipe English, but the editor's language is not less remarkable than his declaration. Its very frankness gives it a *bouquet* of its own. He is so desirous of being not *mis*-understood that he reiterates: "To recapitulate—the propagation of the race is not the all-important object of the sexual embrace; it is but an incident." Perhaps this explains the genesis of the species gas-pipe editors, and perhaps again the word "incident" is a printer's error; the editor may have written: "The propagation of the race is not the all-important object of the sexual embrace; it is but an *accident*." With this amended reading one can understand why "it is calamitous to teach that the one object of the sexual embrace centers in the propagation of the race." And when this "accident" occurs, it is our editor's creed that has taught even the wife to say that she has been "caught." Exercising the highest function of the race, in the highest estate of the social order, and "caught" like a guilty delinquent because she has not escaped its legitimate consequence! "Calamitous!"

Our editor considers whether or not the propagation of
the race is the only purpose of the sexual embrace, w
the air of a man who knows a thing or two, and
are wondering whether it is a mere sensua
solemn duty, he reconciles us to its "
following eloquent squirt: "The
intended to be, and in its normal
educator, a means of developing the
and woman, and of bestowing upon t

love that spark of the divine nature which constitutes the dividing line between the brute creation and man."

Are not things a little mixed when *sparks constitute dividing lines?* Surely these are pyrotechnic feats of which only a gas-pipe editor is capable. And isn't he a little "off" on the "spark" business generally? and a degree or two out of his latitude in the matter of "the children of true love?" The fact is, this "spark" business is decidedly precarious, if we may believe Dr. John Armstrong, whose "Economy of Love" made quite a stir in its day. He wrote:

> "For from the stol'n embrace.
> Untir'd with worn acquaintance, keenly urged,
> Elate with generous rapture, likeliest springs
> The noblest breed, most animated, best.
> What heroes hence have issued! What fam'd chiefs
> And demi-gods of old! The stealth of love
> Gave Greece her Hercules, and mighty Rome
> First rose beneath a random son of Mars."

And did not poor Richard Savage boast that, "Conceived with rapture and with fire begot," he was "No tenth transmitter of a foolish face?" Perhaps it is because these "sparks" are so promiscuous that making love is called "sparking." But it is respectfully submitted that the Occidental editor is "out on the home base."

He is also at much at sea on the moral aspect of the sexual passion as he is in regard to its physiological. *Whose experience* enables him to declare to this effect: "Feminity itself, though tenderly protected by the garb of girlish innocence or of womanly reserve, if normally developed, when awakened by the touch of personal love, *quickly responds* to the masculine demand for sexual surrender?" Had he a mother or a sister, or a wife, and could the memory of none of these suffice to suppress the utterance of a slander that has countless refutations written upon the very calendar of Heaven? Surely, only the ethics of the Stews can find a Cleopatra in every "normally developed" woman.

And he who can thus sully pure womanhood grows maudlin over "fallen women." He testifies: "It is also remarkable that hardly one of these women but that has some corner in her poor heart in which sits enthroned some miserable whelp in whose embrace, often at a terrible sacrifice to herself, she seeks personal gratification and *redemption of the womanhood still left her,*" etc. It is certainly a peculiar place to seek "the redemption of womanhood" in the embraces of a miserable whelp, but it is only a gas-pipe editor writing with the suicidal ease of his species.

It is devoutly to be hoped that this filthy erotomania will not be encouraged to make its sensual exposures in Homœopathic literature; and if any editor has tendencies in that direction we have the right to demand that he shall qualify himself to treat such a subject with at least a respectable smattering of such knowledge as can be acquired by a few hours of semi-intelligent reading; such ignorant assertions as that "*all* possess and have a desire and the power to partake of sexual pleasure," are an insult to every competent physiologist.

Moreover, in writing upon such a topic every writer reflects his own sexual healthiness, or his Nordauish degeneration. Suppose a man who seduced his preceptor's daughter, who courted a grass widow while his own wife lay languishing with a mortal disease, who gave especial attention to the sexual symptoms in our materia medica —suppose such an one should hold forth upon virtue! Foh!

If the editor of the *Pacific Coast Journal of Homœopathy* will borrow a copy of "The Principles of Physiology," by John Augustus Unzer, and will devote a few hours to its teachings, he will make the best possible atonement for his dirty *faux pas.* Meanwhile he can only be as destructive as a bull in a china shop.

All this is written without prejudice, and solely as a plea for clean literature, even if a clean life be found impossible to the like of us.

S. A. JONES.

Ann Arbor, August 13, 1896.

To the Editors of the NEW YORK MEDICAL TIMES:

During the heated term of August the residents in the hospitals of New York City were kept busy day and night, attending to the unfortunate victims of heat prostration.

Even the police patrol wagons and occasionally trucks, were impressed into the service of conveying the patients from the places where they fell to hospitals. The treatment pursued in the various institutions was essentially the same, the main object being the reduction of the intense temperature and the prevention of heart failure.

Although the Hahnemann Hospital has no ambulance, still it did its share of the relief work.

The residents treated about fifteen cases brought in by the Presbyterian ambulance and police patrol wagon. The cases were not "picked," and it is worthy to be recorded that not a single case died. The treatment was energetic and effective, but not harsh, consisting simply of a cold spray to the body and extremities, ice pack to the nape of the neck, and stimulation by hypodermics of brandy and nitro-glycerine (ʒ to gr. $\frac{1}{100}$). The cold spray and ice pack were continued until the temperature was reduced to 99 degrees Fahr., and stimulants used until the heart action improved.

J. H. SCHALL, M. D.

TO RENDER SILK-WORM GUT PLIABLE AND ASEPTIC.

Prof. Augustin H. Goelet, of the New York School of Clinical Medicine (*Med. Record*) employs the following method of preparing silk-worm gut to render it aseptic and pliable: Each strand is wiped off carefully with a pledget of cotton saturated with ether and the frayed ends are cut off. A number of strands are placed lengthwise in a glass tube sufficiently long to accommodate them.

One end is stopped with a cork and the tube is filled with 1 per cent. solution of lysol in water. The other end is stopped temporarily with absorbent cotten, and the tube is placed in a sterilizer, leaving the cotton with stopped end above the surface of the water. This is boiled for twenty minutes and is then removed, and the cotton stopper replaced by a cork. Boiling the silk-worm gut in lysol solution renders it nearly as pliable as catgut, and it can then be quite as readily tied. As required each strand is withdrawn by means of a pair of sterilized forceps.

THE METRIC SYSTEM SIMPLIFIED.

Edward L. Milhau, Ph.G., the well-known drug importer of this city, has elucidated this subject in the February number of *Popular Science News.* We quote some of his deductions, but the whole article is worthy of persual by such as are interested. He says:

The following practical simplification of this system of weights and measures, to render it more acceptable to the general public, is founded by experience in the importing, exporting and dispensing business.

First.—The system should be presented without any elaborate and cumbersome tables. They are as unnecessary as our stating: Ten times one dollar makes a deka-dollar; ten deka-dollars make a hecto-dollar; ten hecto-dollars make a kilo-dollar, etc.

Second.—The pollysyllabic titles should be suppressed and only the initials used, of such as are necessary. Then the capitals *K L M A S* would serve as indeclinable symbols, precisely as the symbol $ does for money.

The hundredths should be designated by a prefix, *c;* thus *ck, cl, cm,* using small letters.

All the foregoing will greatly surpass the symbols $, *cts.* and £ and *d.*, in so far that they are as pronounceable as written.

Third.—The unit for commercial weights should be *K* (and not *G*), to harmonize with its fluid equivalent *L*, as established by the Government of British India.

Fourth.—The notation should conform to that of our currency, hundredths being designated by a small *c*, or placed in a double column, the same as *cents* are on bills and invoices.

The New York Medical Times

A MONTHLY JOURNAL
OF
MEDICINE, SURGERY, AND COLLATERAL SCIENCES.

EDITORS:
EGBERT GUERNSEY, M.D. ALFRED K. HILLS, M.D.

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REMOVAL.

The office of this Journal was removed, May 1st, to 180 West Fifty-ninth street, Central Park South.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 108 Fulton St., N.Y.

SURGICAL DEPARTMENT NATIONAL GUARD.

INSTRUCTION in the surgical department of the National Guard has, until recently, been probably the most inefficient in the Military Department. The office of the Surgeon General has to a great extent been looked upon as a sinecure, and the Surgeon General but little more than a figurehead, with but little to do. Regimental and brigade surgeons have been supposed to be fully competent to meet every emergency that may occur in war or in riots. On the appointment by Gov. Morton of Dr. M. O. Terry, of Utica, as Surgeon General, it was soon demonstrated that the position was one of the most important in the service. Gen. Terry, comprehending fully the importance of his department, set himself at work with his usual energy and zeal to infuse new life into the service, and make his department fully competent to fulfill any duties it might be called upon to perform, either in the camp, in the field, or in the accidents arising in private life. At the State camp a few instruments were found thrown together loosely in a case, but little fit for service, while the drill litter was of the crudest sort, and certainly not fit for efficient duty. There was no ambulance, and, of course, no means for ambulance training, so important in actual service. Garbage was thrown into a pile mixed with chloride of lime to neutralize the process of fermentation. The necessities of the service became fully apparent to Gen. Terry the first year of his administration, but there was no means of remedying the difficulties. On the presentation of the matter to the Legislature an appropriation of $10,000 was obtained for the Medical Department. With the commencement of his second year of service, the Surgeon General, with money to draw upon, commenced the arduous work of placing his department in a position in which it would be an honor to the service and the State. The first week of the second year an ambulance of superb construction was placed in camp ready for work. A most complete set of instruments was placed in the medical instructor's tent, each instrument in its place, and all protected by a glass and iron chest.

The scientific discovery of the laws governing the action of small arms and their effect on animal tissue is a comparatively recent one, and this forms a part of the systematic course of instruction, which embraces everything pertaining to drill and first aid to the injured, which include the management of actual wounds on the battle field before the patient can be reached by the surgeon, and the anatomy of surgical injuries usually met with in the field. Ambulance drill is thorough, and the instruction in sun and heat stroke as complete and efficient as in any hospital. The duties of the medical instructor, which has to do with the instruction of the hospital corps, are clearly defined.

The Post Surgeon examines into the sanitary condition of the camp twice a day, and sees that during drill, or when the troops are on parade, that squads of the hospital corps with litters on hand, are there for emergency. Each regiment has three litters, each battalion two, and each company one. There will be an ambulance for each brigade, and one will remain in the camp of instruction. The hospital corps has been increased from eight to twelve, eight for a battalion and two for each company. In carrying out these improvements, which have raised the service to a standard of excellence not surpassed by any State in the Union, the Surgeon General has been in touch with brigade and regimental surgeons throughout the State, who have heartily co-operated with him in his work.

Never before in the history of the National Guard has the Governor been surrounded with a more brilliant and efficient staff than the present. While upholding the dignity of the State in their attendance on the executive, they have by their energy, their zeal and their intelligence infused new life into their separate departments, making each as complete as possible, and the whole a unit for efficient public service when that service is needed.

HELEN KELLER'S ADDRESS.

THE crowning event at the summer meeting of the American Association to Promote the Teaching of Speech to the Deaf (says the *Philadelphia Record*) was a brief oral address by Helen Keller, the famous deaf and blind girl. Clad in a girlish costume, with dark ringlets falling to her shoulders, and a bright smile illuminating her face, she took the platform to talk on the value of speech to the deaf. The fame of her accomplishments—for she is declared by her teachers to be the brightest girl of her age, not excepting those in possession of all their senses—had attracted a large and deeply interested audience. Without a sign of embarrassment, though to many her articulation was somewhat indistinct, she spoke as follows:

"If you knew all the joy I feel in being able to speak to you to-day, I think you would have some idea of the value of speech to the deaf, and you would understand why I want every deaf child in all this great world to have an opportunity to learn to speak. I know that much has been said and written on this subject, and that there is a wide difference of opinion among teachers of the deaf in regard to oral instruction. It seems very strange to me that there should be this difference of opinion; I cannot understand how any one interested in our education can fail to appreciate the satisfaction we feel in being able to express our thoughts in living words. Why, I use speech constantly, and I cannot begin to tell you how much pleasure it gives me.

"Of course, I know that it is not always easy for strangers to understand me, but it will be by and by; and in the mean time I have the unspeakable happiness of knowing that my family and friends rejoice in my ability to speak. My little sister and baby brother love to have me tell them stories in the long summer evenings when I am at home, and my mother and sister often ask me to read to them from my favorite books. I also discuss the political situation with my dear father, and we decide the most perplexing questions quite as satisfactorily to ourselves as if I could see and hear. So you see what a blessing speech is to me. It brings me into closer and tenderer relationship with those I love, and makes it possible for me to enjoy the sweet companionship of a great many persons from whom I should be entirely cut off if I could not talk.

"I can remember the time before I learned to speak, and how I used to struggle to express my thoughts by means of the manual alphabet; how my thoughts used to beat against my finger tips like little birds striving to gain their freedom, until one day Miss Fuller opened wide the prison door and let them escape. * * * One can never consent to creep when one feels an impulse to soar. But, nevertheless, it seemed to me sometimes that I could never use my speech wings as God intended I should use them. There were so many difficulties in the way, so many discouragements. But I kept on trying, knowing that patience and perseverance would win in the end. * * * So I want to say to those who are trying to learn to speak, and those who are teaching them, 'Be of good cheer.' * * * Remember that no effort that we make to attain something beautiful is ever lost; some time, somewhere, somehow we shall find that which we seek. We shall speak, yes, and sing, too, as God intended we should speak and sing."

Miss Keller, when conversing, reads the motion of the lips by merely laying a forefinger upon them. In this way, she understands everything her teacher says when talking at the rate of 200 words a minute.

She expects, we are told, to enter Radcliff College this fall, having already passed the entrance examinations—and she is but sixteen years of age!

What, now, is the secret of this wonderful success in overcoming obstacles almost inconceivable by the average human being—in emerging from what, a few years ago, would have been utter and hopeless darkness, into the fullest intellectual daylight? Was it inherent force of mind which gave this afflicted creature the victory? On the contrary, it is much more probable that, had she retained sight and hearing, she might have turned out quite a commonplace young person. It is *the intense and unswerving concentration of her every faculty* upon the one great object of self-improvement, that has led to this marvelous and unexampled development. Such concentration, under all the circumstances, was a simple necessity of her being. The soul, once wakened, could do nothing else but struggle upward and onward toward the opening light. There was no influence to bind it down, or divert its energies. Not a moment, not a thought, was wasted. Compared with an aspirant like this, what wretched spendthrifts of time and talents are the most renowned and most exemplary among the multitudes that pity her.

POSSIBLY.

THE fastest locomotive ever constructed will not reach the speed of the frigate bird, which will fly 125 miles an hour, or across the Atlantic in one day. Possibly some observing scientist, watching the motions of the bird, may get at the secret of its power and its great speed and reproduce them in some practical way which will make the air, instead of the earth and the water, the great medium of communication from one part of the world to another.

The chemist, in his laboratory, has so far reached the process of Nature that he has been enabled to construct diamonds, on a small scale, it is true, but equal in hardness and clearness of lustre to those taken from the mines, but the cost of producing them is far greater than of those dug from the earth.

Possibly his art and his skill may still further reduce the cost, but we must wait.

And now comes forward Prof. Emmons, one of the most skilled metallurgists in the world, showing that in the reduction of silver to an aqueous solution the molecules of silver are so subdivided as to differ so far from that metal that they c n no longer be regarded as the same elementary substance, but the parent of both gold and silver, or the raw material out of which by a different arrangement of molecules gold and silver were both constructed by the hand of Nature. Working upon the necessary microscopic scale of experimental research, he finds that this substance can be aggregated into molecules of greater density than silver, and precisely corresponding with gold in color, in weight, and answering to every test of the United States mint as gold. In fact, he says it is gold, though manufactured from silver, of as much purity and value as that ever obtained in its native state, or after it had passed the purifying process of the crucible. With further experiments the process of manufacturing gold from silver may be so cheapened as to settle the silver question now agitating a great nation, and disturbing the financial equilibrium of the world. If so, it would not be the first great question settled in the laboratory of the metallurgist which had defied the logic of the statesman, with all the help obtained from the great financial centers of thought.

WOMAN AND HER BICYCLE.

"AN astonishing physiological phenomenon" is reported from Paris. The size of all fashionable women' waists has increased by three or four inches! The dimensions of the Venus de Milo in that region have been declared the standard, and the modistes are shaping their patterns accordingly. This, it appears, is due to the passion for cycling among the fair sex, which has led to a demand for greater freedom of movement and respiration, and consequently to an expansion of the corset. Perhaps before the century has closed the cause of "dress reform" may win a final triumph through the aid of the bicycle, and both long skirts and tight waists be reckoned among the abominations of the past.

Another important benefit which may be derived from the adoption of this mode of exercise by young girls in particular, is pointed out by a writer in the August number of the *Medical Council.* He recently had a case of labor where, although the patient was a large woman, the pelvic outlet was contracted. The baby being very large, delivery was effected with difficulty by the aid of forceps, and caused a perineal rent extending to the anus. It occurred to the writer that this complication might have been avoided had the patient, in her girlhood, ridden a bicycle having an old-fashioned saddle fitting up between the tubera ischium. The lowermost portions of the innominate bones are, he thinks, gently and gradually pushed apart by the comfortable pressure of the wedge-like saddle between them, under the weight of the rest of the body while riding.

The use of the wheel, if continued at its present rapidly increasing rate, must have an effect upon the form of the pelvic outlet in women, which will become manifest before another generation, or even perhaps within a decade. Our observations, therefore, should begin at once. Measurements of the distance between the ischial tuberosities in children should be taken at intervals, so that comparisons can be made. Non-riders, as well as riders, should be examined, and no young person should be allowed to ride until the construction and adjustment of the saddle have been carefully attended to. In this way it may be expected that the use of the bicycle will, in many cases, result in lessening the pains and shortening the duration of labor.

SANITARY BURIAL.

THE *British Medical Journal* reports the proceedings of a recent meeting of the Burial and Funeral Reform Association of London, at which papers were read by Sir Seymour Haden and Dr. Poore. "The former stated that for the last ten years he had been burying animals, large and small, in the park attached to his house. By digging them up and examining them at intervals varying from one to five years, he found that, buried at the depth of 4½ feet, the depth required by the Government for the burial of human bodies, an interval of from three to four years was necessary for complete resolution; buried at the depth of 1 foot a year and a half had proved sufficient for the larger, and a year or less for the smaller animals. On the other hand, a body not buried at all, but simply laid upon the ground with a covering of earth a foot thick over it, had completely disappeared (the bones excepted) in a year, the mound of covering earth, which had been sufficient to prevent all smell, retaining its shape, but when it was pressed with the foot proving to be hollow.. The body had thus returned to the atmosphere in the shape of oxygen, hydrogen, carbon and other perfectly harmless products necessary for the nourishment and growth of plants. He (Sir Seymour Haden) was amazed at the folly, not to say impiety, of an attempt to beat this provision of Nature. Dr. Poore, in his paper, contended that if a body was buried in such a manner as to further in every way its complete dissolution the land would be ready after due interval of time to receive a second body, and that if the cemetery were systematically and sufficiently planted the earth would be purified and the air around freshened by the green leaves of a flourishing vegetation. The power which scientific burial gave of using the same ground repeatedly after due intervals of about ten years abolished the fear which had been expressed with regard to the amount of ground allotted for burial purposes· An acre of land would prove an ample area for a burial ground in perpetuity for a population of 10,000 persons. Such a burial ground would prove a decided benefit to the living, as supplying in the midst of human habitations a breathing place, which is so essential to the general well-being.

THERAPEUTIC EFFECTS OF CURRENTS OF HIGH FREQUENCY.

D'ARSONVAL, in giving very careful attention to the therapeutic action of currents of high frequency, has reached some very interesting results. He finds marked benefit from the use of this form of electricity in the class of diseases due to the lack of nutrition, such as diabetes, gout, rheumatism, obesity, etc. Two cases are recorded in detail, one of diabetes and one of gout. The apparatus used permitted the passing through the body currents, of which the intensity was upward of 500,000 milliamperes. In its application, the currents, which came from a solenoid, were brought to the body by means of conductors with appropriate electrodes. One of the poles of the solenoid was connected with the water in a foot-bath, in which the patient placed his feet. The second pole was connected with both hands by a two-part conductor, terminating in metallic handles. Under these conditions the current was distributed, and its intensity raised between 350 and 500,000 milliamperes. The duration of treatment, made daily, was at first six minutes ; it was then lowered to five or three minutes, according to the sensations of the patient.

One would naturally suppose the current might be painful, and the beneficial effect arise partly from suggestion, but this is not the fact, for the current acts without the knowledge of the patient, yet it penetrates deeply into the organism, and operates notably on vaso-motor centers.

The experiment was conducted with extreme care at every step, only the most careful and intelligent assistants being employed, who recorded with the utmost care every change in pulse, temperature and respiration.

HEAT PLAGUE.

THE whole country has been going through a scourge, which in point of fatality has exceeded that of the cholera when it has raged in our midst. People thought they were experiencing a realizing sense of Calvin's hell, and sighed for a change to that of Dante's hell.

The week ending August 15th was a record breaker for intense solar heat and its fatal effects. Never since the city has had a registry of vital statistics has such intense heat prevailed for so long a time with such terribly fatal effect. In that week there were 1,810 deaths, nearly 200 more than ever before since the establishment of the Health Department. Of this number 651, more than thrice the number ever recorded before in a single week in the history of the city, were from heat. All the hospitals were crowded, the physicians were working night and day, and still there was not sufficient help or room for the victims. The death rate was like that of a plague-stricken city, reaching 48.65, more than double the average, and the highest ever recorded. The death rate, not including sunstroke, was 30.99, an unusually high average. Of the deaths, 552 were children under five years. In the institutions and in the tenements the death rate was highest. In the institutions there were 436 deaths, as against 216 the preceding week, and in the tenements 1,134 deaths, as against 502 the preceding week. In the institutions and among the tenement population the effects of the terrible heat will be felt for weeks to come, and swell the list of deaths above the normal average.

TRANSPLANTING THE URETERS.

SOME time ago an Italian surgeon, Signor Borri, published some successful experiments on the implantation of the ureters into the intestine. The experiments were done on dogs with a modified form of "button." He has now, as a result of these observations, successfully applied the method to the human subject. The ureter is fastened round one end of a bobbin, which is then introduced into the bowel through a small longitudinal incision, which is afterward sewn up. In process of time, union occurs, and the bobbin is passed *per anum*. The first case was one of vesical tuberculosis, and the "button" was passed on the eighth day with the silk used to affix the ureter round its neck. The first urine was noticed from sixteen to twenty-four hours after the operation, and afterward at intervals of two or three hours—about 200 to 300 centimetres. In the second case, one of a large vesico-vaginal fistula with total destruction of the urethra, the "button" came away *per anum* on the twelfth day. In both cases the results were highly satisfactory.

THE ALCOHOL AND OPIUM HABIT.

A GENERAL concensus of opinion points to strychnia and arsenic as the most potent remedies now known in controlling a habit so terrible in its results and, hitherto, so difficult to reach. Our own plan has been to administer the drugs by hypodermic injection three times a day in the strength of ^{1} grain nit-strychnia and $\frac{1}{60}$ grain of arsenic, at the same time impressing upon the mind of the patient that he is taking a cure, and must expect beneficial results.

Four thousand patients pass through the alcohol wards of Bellevue Hospital every year. Selected patients, after having passed through an attack, are allowed to remain two days and take the "cure" prescribed by Dr. Dana. The first day three injections are made of the following:

Solution strychnia nitrate	gr. $\frac{1}{15}$
Atrophia sulph	gr. $\frac{1}{300}$
Aqua	♏x

The second day the strychnia is increased to gr. $\frac{1}{20}$, and atrophia to gr. $\frac{1}{200}$. A mixture is given at the same time three times a day:

Tincture cinchon. comp	♏xv
Tincture capsici	♏i
Tincture solum carolinem	♏xii
Vini ferri amari	ad ʒi

A cup of hot milk is alternated with a cup of hot beef tea or broth, two hours apart. After two days the patient is discharged, and is then given:

℞ Tincture columbo	℥i
Tincture capsici	♏xv
Tincture nux. vom	℥i
Apomorphia	gr. $\frac{1}{8}$
Tincture cinchon. comp. ad	℥iv

Of this a teaspoonful is taken after each meal, and the patient told to report weekly. Dr. Dana says "by the application of this method to those afflicted with the alcoholic or morphine habit we are able to send out many patients with hope in the future, a confidence in themselves, and a staff upon which to lean in this weakness."

OPIUM POISONING AND PONS APOPLEXY.

THE symptoms of these two conditions resemble each other so closely that hemorrhage into the pons varolii is often mistaken for opium poisoning. The contracted pupil, contracted so closely that it is not much larger than a pin's head, was supposed to be a distinctive symptom of opium poisoning, and yet that symptom is equally marked in pons apoplexy. In both cases we have the slowness of respiration, the uneasiness, the pinhole contraction of the pupil, the stertorous breathing, the twitching and convulsive movements of the face and limbs. These symptoms may be present in varying intensity, but they are just as likely to be present from one cause as the other. Fortunately, pons apoplexy seldom occurs. Out of 386 recorded cases of brain hemorrhage, three only were of pons hemorrhage. The symptoms resemble each other so closely that in a trial for murder, in the absence of opium found in the stomach, an autopsy can only reveal the real cause of death. The presence of the clot settles the matter so far as the pons is concerned, but even the skill of the chemist fails in differentiating between the vegetable opium and the ptomains generated in the system, both producing the identical symptoms. In face of the liability to errors of diagnosis in which a human life may be sacrificed, would it not be wise to adopt some other punishment for murder than the halter or the electric chair?

ORGANIC MEMBRANES AS INSULATORS.

INVESTIGATING the action of electricity on the human body from a therapeutic standpoint, the recent experiments of Sir Benjamin Ward Richardson are full of interest and instruction. In addition to the uses generally attributed to the organic membranes we find another action, and not by any means the least important, which has heretofore been, in a great measure, overlooked. He considers, and thinks that he has demonstrated by actual and repeated tests with the battery, that these membranes are really electrical insulators, and by their position and by their presence confine and render useful the vital force that is developed in the organs they surround. Dr. Richardson's first observation leading to this conclusion was conducted on the nervous membranes, those that envelop the cerebral convolutions and the spinal cord. From these experiments he passed to other membraneous envelopes, including all the large joints and found they all had a similar quality.

OZONE AS AN ANTISEPTIC.

SIR JOHN E. MILLAIS, the celebrated painter, and President of the Royal Academy, has just died of cancer of the throat, for which, in May last, tracheotomy had to be performed. It is reported that since then the terrible distress attendant upon the later stages of the malady was almost entirely obviated by the employment, for the first time, of ozone as an antiseptic. The gas was conducted from a reservoir of oxygen in a room adjoining the patient's, and was introduced through the tracheotomy tubes. It kept him alive and free from pain during the last three months, and also prevented the odor usual with cancer. His surgeon testifies that "he had practically no narcotics whatever," and that no man ever passed through such grave illness with such comfort as Sir John Millais during the period following the operation and the employment of ozone. This will indeed be welcome news to a large and increasing class of sufferers.

DR. AUGUSTIN H. GOELET, Professor of Gynæcology in the New York School of Clinical Medicine, (*Clinical Recorder*, July 1896), believes that the best method of closing the abdominal wound after coeliotomy is to use a continuous suture of fine (No. 1.) chromic catgut for uniting the peritoneum, and to include with this suture the muscle but omit the fascia. Next, deep sustaining interrupted sutures of silk-worm gut are inserted. These are made to include the skin, facia and muscular layer. Before tying these the fascia is united separately with a continuous suture of the same fine chromic catgut.

The silk-worm gut sutures are now tied, the surface washed off and dried carefully.

The ideal dressing for the wound is one which has no disagreeable odor and will keep it perfectly dry. This will prevent germ propagation. He now uses a boro-phenate of bismuth, known as markasol, which has given more satisfaction than anything else that has been employed.

This is antiseptic without being irritating, and is slightly absorbent and astringent. It will absorb the first oozing from the wound, but holds in contact with the margin of the wound the protective lymph which is thrown out to favor union. It is dusted plentifully over the wound, covering it and the sutures completely; over this is placed a layer of plain sterilized gauze, and over this several layers of absorbent cotton, which is held in place by strips of rubber adhesive plaster (nearly encircling the body) and a many-tailed bandage.

This dressing may be left undisturbed until the sutures are removed. Then the same powder is again used and a similar cover dressing reapplied.

Since adopting this method of closing and dressing laparatomy wounds they have given no trouble whatever, but have invariably healed by first intention, and the eschar is firm and unyielding.

EXTREMES OF CLIMATE.—The coldest climate in the world is not at the extreme North, but within the Arctic circle, at a place called Welschigansk. At this place the thermometer is sometimes at 94° below zero, and for five months at a time does not get above 76° below zero, yet in July it has gone as high as 86° above zero, making a difference of 180° during the year. The hottest place in the world is in Death Valley, in Arizona. The valley is situated below the surface of the sea, and is destitute of vegetation and animal life except the very lowest form.

DR. BISMARCK.—An exchange says: "Bismarck has had the degree of Doctor of Medicine conferred upon him by the University of Jena." If the administration of cold steel, iron pills and gunpowder with such telling force as to crystallize small States and principalities into an empire, and humble one of the proudest nations on the earth, can be classed under the head of therapeutic agents, no one is better entitled to the degree than Bismarck. Prince is simply a title of honor, but Dr. Bismarck has a meaning which tells its own story.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

BIOLOGICAL SOCIETY.

M. De Nettis inoculated cultures of the proteus, the microbe of gangrenous pleurisy, which kills rabbits and guinea pigs in twenty-four hours. He obtained a therapeutic serum, and rabbits vaccinated with it have constantly survived injections of the proteus.

M. Wurtz, for M. Bosc, of Montpellier, read a paper establishing the danger of intravenous injections of distilled water, which destroyed the globules of the blood. M. Roger showed that after injections of the serum of the blood of a healthy horse, the increase of the secretion of urea is the same as after injection of anti-diptheritic serum. M. Courmont proved that after ablation of the spleen in animals, pyocyanic and staphylococcic poisoning is attenuated, while the staphylococcic is increased.

M. Mougie investigated a cyst developed in a fold of the peritoneum of a chicken, that had no communication with the intestine. Its walls were thin, smooth and very vascular, and it rapidly disappeared after abstinence from drinking, but soon reappeared on taking fluid, thus explaining the rapidity of osmotic exchange. M. Marinesco photographed aeromegalic hands with the Roentgen rays.

As was indicated in four subjects by P. Marie, the osseous increase involved the epiphysal and apophysal extremities of the bones; there were no osteophytes. In this development the age of the patient has an enormous influence, as has been shown by Recklinghausen, Simard, Brissaud and Meige. Marie has described an acromegalia of gigantic type, developed at the period of adolescence, while in older individuals it is at the summit of the osseous extremities, and in their substance, that the hypertrophy occurs, and which Arnold calls pachyacria. Upon photographic investigation one is struck with the fact that in the adult the bone is increased in mass, while in the adolescent the diaphysis or shaft seems to be lessened at the expense of the thickened epiphyses.

ACADEMY OF MEDICINE.

The Normal and Pathological Thickness of the Crainal Bones.—M. Pean, after showing the great variations of the crainal thickness in the normal and pathological conditions, presented a new and very ingenious polytritome moved by electricity, and that effected the removal, without fear of injury to the meninges of the brain, either of extensive osseous portions reapplicable after trepanning, or of portions definitely removed. In the treatment of nervous diseases that justify craniectomy, Charcot, Voisin and Ballet have recommended letting the osseous breach continue. In other cases, M. Pean prefers the reapplication of the osseous and cutaneous flap.

Medical Electrolysis.—M. Duplay read a report of a work by M. Boisseau Du Rocher, entitled "Medical Electrolysis in the Treatment of Tuberculosis and Diseases of the Uterus and its Annexæ.

Exploration of the Abdomen in the Bath.—M. Marc Sée showed that the relaxation of the parietes when in contact with the water very much facilitated exploration of the abdomen. It is especially in very obese subjects that the fatty walls, while floating in water, have a mobility that makes palpation much easier.

Gastro-Enterostomy.—M. Lejars reported a case of cure by gastro-enterostomy of pyloric stenosis rapidly produced by the ingestion of chlorhydric acid. In six weeks the patient had increased sixteen pounds in weight.

Double Ovariotomy in One Pregnancy.—M. Mouchet, of Sens, reported a double ovariotomy in a woman, three months pregnant, continuation of the pregnancy and delivery at term. M. Mouchet also reported a case of paralysis of the radial nerve, resulting from a fall upon the arm, in which stretching of the nerve, two months after the accident, soon restored both sensation and motion.

Irido-Choriditis of Internal Origin.—MM. Vigne and Batuaud presented an instance of the above disease, occurring at the menstrual periods in a woman affected with endometritis. Curettage produced a complete disappearance of the ocular troubles, and the cure has continued for six months.

Septicæmia.—M. Ferrand read a paper by M. Delose, of Lyons, showing, first, the bacterial associations of the coli-bacillus and streptococcus, and the streptococcus and pneumococcus in septicæmia; second, the effects of stasis of the blood in the lungs and intestines, and of mucosities in the lungs in producing the multiplication of bacteria.

Sero-Diagnosis of Typhoid Fever.—M. Dieulafoy, after reciting the difficulties of the diagnosis of typhoid fever with glandular complications, meningitis, infectious grip, ulcerative endocarditis, typhus, etc., recalled the important discovery presented by M. Widal on the 26th of June to the Medical Society of the Hospitals. By adding to a few drops of the pure culture of the bacillus of Eberth one drop of the bloody serum obtained by a simple puncture of the finger, the microscope reveals the bacilli, isolated and moving, if the serum comes from a healthy subject or one affected with nephritis, icterus, pneumonia, rheumatism, tuberculosis, etc. On the contrary, they—the bacilli—become agglutinated, fixed and reunited in islands, so to speak, with large intervening spaces, if the serum is taken from a patient affected with typhoid fever. From the seventh day the reaction is very marked, and M. Dieulafoy presented two preparations obtained, one on the seventh, the other on the twelfth day, and absolutely typical. The remarkable discovery of M. Widal, besides its importance in daily practice, allows the exact classifications of infections with typhoid complications, such as pneumo-typhus, or the mixed typho-paludal infections of hybrid character.

Treatment of Inguinal Hernia in Children, by Injections of Chloride of Zinc.—M. Lannelongue presented several children operated upon by this process. Five punctures of five drops each of a solution of $\frac{1}{10}$ are made, taking care to avoid the cord. After considerable swelling an indurated plug succeeds, which solidly obliterates the canal, and resists all intestinal impulse upon the ring. Cicatrices are rare and very small.

OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY OF PARIS.

M. Porak has had occasion to make injections of anti-streptococcic serum in cases of puerperal infection. In one case of acute infection, which evolved in two days, the symptoms were of a character so grave that death seemed imminent. In a second instance, the danger was caused by the retention of the decidua within the uterus, and amelioration and cure followed the simultaneous employment of curettage and serum injections. The third case was peculiarly interesting, because the febrile complications occurred in two attacks within an interval of a week, the first on the fifteenth day. The patient was albuminuric, and showed symptoms of uremia at the time of the serum injection. The febrile condition lessened in intensity twice, after the appearance of phlegmasia dolens, first on the right, then on the left side. The first injection was followed by an aggravation of the uremic troubles, but they soon subsided. The patient had diarrhœa, and vomiting supervened upon the first injections. Perhaps this might account for the comparative mildness of the uremic troubles.

Action of Roentgen Rays Upon Certain Microbes.—At the Academy of Sciences, M. Chauneau read a report by M. Lortet, Professor of the Faculty of Medicine at Lyons, upon the action of the X-rays upon certain microbes. M. Lortet, after inoculating guinea pigs with the bacillus of Koch, submitted the points of inoculation, after a few days and at different intervals, to the effects of the rays. He observed each time a manifestation showing itself by an amelioration of the general condition of the subjects of the experiment. M. Chauneau expressed satisfaction in being able to declare the facts alone without further argument. Not one of the animal "witnesses"—a term used in the laboratory to indicate those animals which were not subjected to the experiment—experienced the same amelioration. In them the inoculation followed its usual course. M. Berthelot asked if M. Lortet had experimented with his method upon subjects of erysipelas. That being a disease that presented superficial manifestations, visible and palpable, it would be interesting to follow the evolution of a case under the influence of the Roentgen rays. M. Chauneau replied that he was not informed upon that point, but in his opinion the observations of M. Lortet seemed as yet too incomplete to form a clear and precise judgment upon the subject.

MEDICAL SOCIETY OF THE HOSPITALS.

Codeine as an Adjuvant of Dilation of the Glottis in Croup.—M. Dariot: By leaving the tube of O'Dwyer, for three or four minutes, in the larynx of children affected with spasm of the glottis, the spasm disappears for a time more or less long, after its removal. Its return may be prevented by the administration of a drop of the syrup of codeine, as proved by experience. MM. Dariot and Bayeux also showed that O'Dwyer's tube may be advantageously used in membranous diphtheria of the larynx, without keeping it in place. When the membranes are abundant, introduce the tube; its orifice is closed by them, and both tube and membranes are immediately expelled by coughing; this process is particularly to be employed when permanent tubage is impossible. M. Rendu communicated the case of a young man who presented all the symptoms of typhoid fever; an examination of his blood by Pleiffer's method showed that it was not typhoid fever, and there was no reaction of the typhic serum by the culture of the bacillus of Eberth. Other experiments made upon a patient affected with acute enteritis, gave the same negative results.

M. Widal has again proved the reaction in a difficult case, in which there was hesitation in pronouncing it ulcerous endocarditis or typhoid fever. The reaction was thoroughly distinct and permitted the diagnosis. In seventeen persons, healthy or affected with other diseases, it was always wanting. In eight others, cured of typhoid fever for more than a year, it was present in only one.

M. Lemoine, *apropos* of the communication by M. Comby in relation to recurrent scarlatina, insists upon the fact that scarlatiniform erysipelas of streptococcic origin nearly always presents some anomalies in its form or mode of evolution, or its concomitant symptoms, which distinguish its diagnosis from scarlatina. We should consider as relapses only the scarlet erythema with fever, angina, and buccal exanthema supervening in the course of scarlatina. In 200 cases of scarlatina he had seen only two cases. He also reported an observation of scarlatiniform erythema that supervened upon a suppurative coxalgia, in which the eruption spared the neck, the face and the extremities. It should be considered as a streptococcic infection. M. Gaillard presented a patient affected with embolism of the right axillary artery, consecutive upon an aortic contraction without antecedent rheumatism. The circulation was re-established by collaterals, and there were besides signs of peripheric neuritis. M. Lamnois presented an application of the Roentgen rays for investigation of lesions of the skeleton in chronic progressive rheumatism. The patient, forty-seven years old, was affected with arthritis of the metacarpo-phalangeal articulati of the two hands, with no rheumatic, tubercular, blennorhagic or syphilitic manifestations. There were muscular atrophy, retraction of the tendons, trophic and vaso motor troubles of the skin. The application of the rays shows how slight are the modifications of the skeleton in the swellings and deformities of the articulations. M. Dalche presented a case of recurrent infectious icterus —disease of Weil—with nephritis. This affection was due to drinking a large quantity of Seine water, and might be considered as a general infection. M. Reudu: Poisoning by unwholesome water or food, seems to be the cause of many pathological conditions, some of which present the infectious phenomena that accompany icterus; in others again there is hepatic congetion without icterus. There are numerous transitions of these conditions, all springing from the same cause. M. Netter: The accidents caused by impure water are polymorphous, but the absence of icterus would not differentiate a type. M. Mallet reported the history of a man affected with left hemiplegia, who succumbed to broncho-pneumonia. The special interest in this consists of the fact that in the old locality of the cerebral hemorrhage, there were found numerous white globules and peripheral vessels surrounded by leucocytic deposits, and thus was the old extravazation infected by the influence of the broncho-pnuemonia.

SURGICAL SOCIETY.

Resection of the Rectum.—M. Chaput, in ten resections of the rectum, counts eight cures and two deaths—one from broncho-pneumonia by ether, and one from laceration of the ureter in a case in which an operation was hardly admissible.

Fibroma of the Ear.—M. Kirmisson related a case in which there was a tumor of the ear resembling cheloid in view of its structure and its sub-cutaneous situation. M. Quenu: What should be the treatment of cheloid? Surgeons, partisans of extirpation, are nearly all discouraged. Scarifications and electrolysis have also been tried. M. Quenu prefers the latter to all others, and cited two cures effected by it. He has also employed galvano-puncture, especially in cheloid due to cicatrization of suppurative strumous glands. It is an excellent method, and sometimes gives very satisfactory examples of cure. M. Berger had seen two kinds of tumors of the lobe of the ear, and three cases of veritable fibroma. Histologically they were old fibromata. He has also observed cheloids characterized by a number of phenomena. They are superficial, inflammatory, painful and irritable. Upon examination they present a yellow conjunctive tissue that resembles sarcoma. Scarification and electrolysis require many applications. M. Lucas Championnière: Cheloid is capricious, and sometimes one treatment succeeds and sometimes another. M. Kirmisson thought that were different kinds of tumors of the lobule of the ear, fibroma, cheloid and sarcoma. Cheloid assumes a special form; if there be mobility, we have to deal with a fibroma.

Discussion Upon the Subject of Choledochotomy.—M. Monod related a case of exploratory laparotomy for a spontaneous obstruction of the choledochus. Diagnosis of calculus had been made, despite great distension of the gall bladder. No calculi were found, and the vesicle was attached to the stomach by means of Murphy's button. Sudden death. Autopsy: Biliary passages distended and cancer of the head of the pancreas explained the death and the disease. This was a case of cholecystogastrotomy. M. Quenu remarked that the intervention called for serious consideration. M. Michaux again defended the lateral operation for choledochotomy. He did not fear the importance of hemorrhage, and criticised the median incision. M. Quenu supported the latter.

Why are Bones Impenetrable to the Roentgen Rays?—On photographing the different parts of the body of man and animals by means of Crookes tubes, a great difference is observed in the shadows obtained in the photography of the bones and fleshy parts. Does this difference depend upon the presence of metallic oxides in the osseous substance, of the calcium from which proceeds their density? In order to settle this question the results obtained by the photography of the normal and decalcinated bones were compared. These latter gave a very faint shadow, and scarcely perceptible, as compared with that of the normal bone. The cartilages are also as penetrable as the fleshy parts, and on photographing the thorax of a fœtus, three points of ossification at which the calcium had begun to accumulate, gave three very marked shadows. The conclusion resulting from these experiments is that the impenetrability of bones to the X-rays, as compared with the soft parts, depends principally upon the quantity of calcium they contain.

Upon the Presence of Certain Crystals in the Pathological Tissues of Man.—Prof. Potvyssotzky, in the "Russian Pathological Archives," describes a remarkable case of destructive cancer of the face, in which, upon microscopic examination of the neoplastic tissues, a large number of hyaline globules and crystals were observed among the mesodermic cells and situated under the epithelium. The hyaline globules and crystals are of the same color, and formed of the same substance; they are found in the cells, and are of cellular origin, but a part of their substance is of extra-cellular origin. Under the influence of the metabolic action of cellular protoplasm, the extra-cellular substances combine with the substances elaborated by the cells themselves, from which there results the formation of a new substance which assumes the form of hyaline globules and sometimes of crystals.

Etiology and Treatment of the Night Sweats of Phthisis.—The abundant transpiration of phthisis is due to the insufficient elimination of carbonic acid, and the retention of this gas in the blood. It has been demonstrated experimentally that the accumulation of carbonic acid in the blood provokes profound sudorification. In the phthisical, the respiratory surface of the lungs being greatly diminished, the more so as the lesions become more extensive. The sweating supervenes only at the second period; that is, at the period of softening. Why do the sweats occur particularly at night? It is because the organic changes are then greatly diminished, the functions of all the organs are measurably depressed, the cutaneous secretions diminished, and hence the accumulation of carbonic acid in the blood, and finally the excitability of the vaso-dilators is increased. From these general considerations the following are recommended as the best means of overcoming the night sweats of phthisis: Respiratory gymnastics or prolonged movements by walking, during which the patient should make a number of very deep inspirations and expirations, and execute a number of movements with the arms, thus causing the elimination of carbonic acid; combine with these hydrotherapy, which diminishes the excitability of the cutaneous nerves, and finally liberal alimentation.—*Dr. Skrainka, Wiener Medizin Press.*

Treatment of Tabes.—Prof. Erb, in accordance with numerous statistical facts, which demonstrates that tabes is nearly, if not always, a parasyphilitic affection, recommends highly an anti-syphilitic treatment, mercurial frictions especially, in connection with other measures such as hydrotherapy, electrotherapy, suspension, the nitrate of silver, etc. The anti-syphilitic treatment is that which gives the best results. He has never observed any ill effects from the mercurial treatment in tabetics, but on the contrary, has always obtained satisfactory results. —*Munich Medicin Wochenschrift.*

Etiology of Ozena.—M. Abel, after careful investigation, considers ozena an infectious disease. The bacillus of ozena is analogous to the pneumococcus of Friedlander, and is distinguishable from it by a few secondary characters. It causes in the nose a pathological process commencing by small deposits, which soon become covered by a muco-purulent exudation that rapidly dries. These deposits become confluent, and produce hypertrophic, and later atrophic, modifications of the nasal mucus. The fetor of the ozemic secretion is due to special, but imperfectly defined, organisms.—*Munich Medicin Wochenschrift.*

ACADEMY OF SCIENCES.

A Rare Case of Parasitism.—M. Edmond Perrier reported, in the name of MM. Freche and Brille, of Bordeaux, a case of a man whose head and arms were covered since 1891 by a parasite belonging to the group thysanouros, and which has defied all treatment. During the winter the parasite seems to disappear, but to renew its activity in the spring ; it is not contagious.

Medullary Lesions Caused by Tetanic Toxine.—M. G. Marinesco has examined the medulla of three guinea pigs inoculated with tetanic toxine. The resulting lesions depend upon the intensity of the virus and the duration of the toxine, and are as follows : The anterior and posterior gray substance presents diffused hemorrhages, more numerous in the anterior coruna.

Effects Produced by Intravenous Injections of Simple and Compound Saline Solutions.—MM. Bosc and Vedell, of Montpellier, have arrived at the following conclusions. 1st : The compound saline solution reproduces the effects of the simple solution. 2nd : The sulphate of soda is not of any real utility. 3rd : The physiological value of the compound saline solution is not superior to that of the simple solution. 4th : The simple solution at 70 per cent. is sufficient and preferable to that at 50 per cent.

Gastropexia.—Dr. Duret, of Lille, has published many operations for gastropexia, falling of the stomach, and proposes to generalize the method used for prolapsus of the stomach, which is so common and which causes such intolerable suffering. The operation is without danger, as it consists in a simple laparotomy without opening the viscus. The following are the steps of the operation: First: Median laparotomy down to the umbilicus. Second: Searching for the stomach. Third: Fixation of the pylosus and the lesser curvature to the abdominal wall by a series of separate points. Fourth : the ordinary closure of the wall.

Unreliability of Bacteriological Examination in the Diagnosis of Diphtheria.—Dr. Dariot, in the *Jour. de Clin. et Therap. Infantile*, says : The culture of serum constitutes a means of investigation very convenient, rapid, but incomplete, and the bacillus of Loeffler thus obtained has no absolute value as a sign of diphtheria. In order to be certain, the degree of virulence of the bacillus must be considered. This research necessitates long and complicated manipulation, eight to ten days at least, and if the cultures are not entirely virulent, the bacillus is a pseudo-Loeffler. In practice, if the presence of the bacillus coincides with the clinical manifestations of diphtheria, it will corroborate the diagnosis ; if they are wanting, then the pseudo-bacillus is present. Many observations of simple angina, from a clinical point of view, the exudations from which have been submitted to bacteriological examination, have given beautiful cultures of Loeffler's bacillus, but they were not virulent.

Treatment of Menopause; Troubles, Natural and Anticipated.—Menopause troubles, natural or anticipated, because of the extirpation of the ovaries, are particularly of a nervous nature. Among them is one constantly met with, and nearly pathognomonic, viz.: flushing heat accompanied with profuse sweating and a sensation of choking. The attack generally begins in the lower extremities. The patient feels the blood mounting to the head, face becomes red, and soon the sweating supervenes upon the face, and sometimes on one-half the body, with dizziness and precordial anxiety. The attack lasts for a few seconds or minutes, and returns at irregular intervals, causing much suffering with insomnia, tendency to suicide, and a prevailing idea of persecution. Prof. Landau of Berlin, conceived the idea of treating these cases with an extract of the ovarian gland. He used the ovaries of cows and heifers dried at 60 to 70°, to which he added something to correct the taste, and administered it in the form of tablets of three decigrammes. "All my patients," said he, "were completely cured or considerable improved."—*Berliner Klineshe Wochenschrift.*

Importance of the Rectal Touch as a Means of Diagnosis in Diseases of Children.—The rectal touch, combined with bi-manual palpation, is a valuable method of diagnosis in children. Dr. G. Carpenter has had occasion to employ it with success in many instances. In one case, by it he discovered a tumor on the anterior face of the sacrum in a child affected with obstinate constipation, and that had been uselessly subjected to all sorts of treatment. In another he discovered an abscess of the prostate which had caused an umbilical fistula, the cause of which was unknown. The rectal touch in children permits the exploration of a large portion of the abdominal cavity above the pelvis. The granulations of ascites and of tubercular peritonitis can be easily recognized by this process, also intussusceptions and tumors of the genital organs in young girls.—*Pediatrics.*

Simultaneous Extra-Uterine and Normal Pregnancy.—Dr. Thomas Mitchell reports that he was called in the month of December, 1894, to a woman suffering severely with abdominal pains. The last menstruation occurred in the previous month, and there were certain indications of pregnancy. The pains subsided from the use of opiates. During the month of March following they returned, and it was observed that the form of the abdomen differed from that natural in pregnancy. On the right side there was a round tumor, limited and resembling the gravid uterus, but upon the left there was another tumor badly defined, with irregular borders, in which there was a distinct souffle easily heard, while in the right tumor there were neither souffle nor the fœtal cardiac sounds. The neck of the uterus was largely expanded and easily admitted the finger, by which the fœtal head was readily detected. On April 27th the patient was delivered of a child of six months ; then the second tumor could without difficulty be limited, the souffle continued and there was manifestly an extra-uterine pregnancy. On the 28th active abdominal pains occurred, which resisted medical treatment. On the 29th patient examined under chloroform ; diagnosis of extra-uterine pregnancy was confirmed ; laparotomy was proposed, but refused ; patient died the next day. The autopsy revealed a fœtal cyst that had broken into the abdominal cavity and caused death.—*British Medical Journal.*

Nature of the Laryngeal Lesions Occurring in the Course of Typhoid Fever.—Dr. Watson Williams is opposed to the opinion of Dr. Kauthack, who attributes the laryngeal lesions of typhoid fever to the ordinary microbes of suppuration. He believes that the ulcerations are due to a secondary infection by the specific bacillus and its toxine, and is supported in this opinion by Cornil and Ranvier, who report ulcerations and alterations of the lymphoid tissues of the respiratory mucous membrane analogous to those of Peyer's glands in the intestine. In the course of typhoid fever, the bronchiæ and lungs are often affected, and it is probable that their lesions are caused by the same specific bacillus.

Value of Antiseptic Pulverizations of Sublimate.—Dr. Charigny has repeated the experiments of Geppert relative to the mode of action of sublimate upon the microbes of dust. After pulverizing different kinds of dust with sublimate at 1 per 1,000, he observed that the microbes were not destroyed by the antiseptic, but only rendered impotent because of a liquid deposit upon the surface of the microbic cells. If by any chemical means, for example, washing with the sulphydrate of ammonia, the protecting layer was removed, the microbes renewed their vital activity and all their virulence.

Treatment of Retro-Sternal Goitre.—If surgical intervention be not urgently demanded, medication with iodine is certainly indicated, and suffices in many cases. Should this fail, then fixation of the thyroid body above the sternum should be tried, But should there be a tendency to resume its unnatural position, recourse must be had to a bloody operation which will alone remove the dangers that menace the patient. The operation consists in the extirpation or the enucleation of the tumor; and in order to avoid the scrofulous cachexia that might ensue it is indispensable to limit the operation to a partial ablation of the gland. For malignant goitre early extirpation should be practiced, and the gland removed in its totality. *Heydenreich, of Nancy, Semaine Medicale.*

Treatment of Diffused Papilloma of the Larnyx.—All medical means (cauterizations, insufflations, nitrate of silver, chromic acid, sulphate of zinc, etc.) have been demonstrated to be insufficient. The treatment of diffused papillary polypi of the larynx necessitates energetic surgical intervention. In infants, tracheotomy should be practiced, and the child saved by opening the thyroid and curettage of the larynx. In children of more advanced age the operation should be performed by the natural passages, and by tearing away the papilloma. In adults, in cases of soft papilloma, recourse should be had to tearing, followed by cauterization, and for hard papilloma tearing and excision should be combined by means of scissors for cutting and removing. Excision by the knife and ligature may be employed where the tumors are upon the free borders, the galvanic ligature where hemorrhage is feared. In all cases intervention should be followed by curettage, combined with cauterization with the chloride of zinc or salicylic acid.

The Influence of Somatose Upon the Mammary Secretion During Lactation.—Somatose exercises a specific action upon the mammary glands of women during the period of lactation. It produces an abundant secretion of milk, and causes the rapid disappearance of the troubles that occur usually at that time. Such is the conclusion arrived at by Dr. Richard Drews, of Hamburg, and the result obtained by Wolfe and Taube are analogous. Somatose probably exercises a direct action upon the mammary glands, and its effect is speedily manifested in the increased lacteal secretion. The dose is three or four spoonfuls daily, in milk or some warm drink. It is readily acceptable, and may be continued for a length of time.

SOCIETY OF RUSSIAN PHYSICIANS: "THE CONGRESS OF KIEW."

Incomplete Coitus as an Etiological Factor of Neurasthenia.—Prof. Tschlie (of Dorpart) has collected seventeen observations in which incomplete coitus was the principal if not the only cause of neurasthenia, and thirty six in addition, in which this anomaly of the genital act was one of the principal causes. To the first group belong eleven men and six women, from twenty to thirty years of age, of the intellectual class and of social prominence. They manifested no psychopathic infirmity or irregularity, hereditary or acquired, and were generally free from any antecedent affections that could influence the etiology of neurasthenia.

Incomplete, or rather interrupted coitus, was practiced by these patients in order to avoid fecundation. In one case in which incomplete coitus was practiced for ten years, the woman became pregnant, "by mistake," and during the whole period of her pregnancy and lactation, the husband and wife continued in perfect health.

In these patients, the neurasthenia was especially characterized by two symptoms—fear and distrust of life. The treatment consisted in complete abstention from conjugal relations for two months, and at the end of that time in the employment of certain artificial measures to avoid fecundation without having recourse to incomplete coitus. "Of the two evils, it is always necessary to choose the least." Abstention rapidly produces the cure, but it is rarely that they do not relapse. Prof. Beckferer said: We know that the anomalies and perversions in the accomplishment of the genital act have a profound influence upon the psychic sphere. It is not astonishing that incomplete coitus should be one of the numerous caeses of neurasthenia. This anomaly has a more pernicious influence upon the man than the woman, which is easily explained by the more active part taken by him in the sexual act. As to the admission of a variety of neurasthenia caused *exclusively* by incomplete coitus, the facts we possess are not sufficiently precise and absolute to warrant a positive affirmation.

J. A. C.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Treatment of Syphilis With Small Doses of Mercury.—Boing (*Deutsche Med. Leit.*, 1896; *Med. & Surg. Rep.*) begins the treatment of syphilis with a dose of 0.005 calomel three times a day. When the symptoms improve after four to six weeks' treatment, he administers the same dose, only every two or three days. Later, he decreases the doses to 0.002 for the first four days twice a day, and for the following eight days only once a day, and at last, after eight weeks' treatment, the dose is reduced to 0.001 twice a week. He obtained the best results with pregnant syphilitic women.

Calcium Carbide in the Treatment of Cancer of the Uterus.—At a recent meeting of the Academie de Medecine, a report of which appeared in the *Gazette Medicale de Paris* for April 18th, M. Guinard stated that for the last three months M. Peyrot had employed this substance in treating cancer of the uterus; the mode of treatment was as follows: A piece of the calcium was placed directly in the vault of the vagina, where it very soon became decomposed into calcium oxide and acetylene by contact with the moisture. At the end of several days the oxide was removed by means of irrigation with corrosive sublimate. This treatment could be repeated several times. The results were very appreciable, said M. Guinard, for the diseased parts assumed a grayish tint and became smooth, and the hemorrhages, the fetid discharge and the pain were suppressed by this procedure. Diarrhœa also, he said, could be avoided by the employment of small pieces of this substance.

With regard to the mode of action of calcium carbide, said M. Guinard, it was rather complex. The nascent quicklime acted, without doubt, in concert with the acetylene, which passed into the urine, where it had been found. Perhaps, he said, by contact with the cancerous elements, it formed a sort of special coagulation of the blood, analagous to that which was observed in persons who had been poisoned by gas.

Treatment of Wounds by Formalin.—Schleich announced at the Balneologic Society (*Therap Wochenschr.*, March 15) that he has discovered a new way of causing wounds to heal, that renders the greatest triumph of modern surgery, antisepsis, entirely superfluous. With it there is no need for any carbolic or sublimate solution or idoform gauze. The process consists in sprinkling pulverized gelatinized formalin in the wound, which produces some chemic change in the organism. The living cells take up the formalin, and it acts upon them in some way that has an accelerating effect upon the healing processes of the wound. Pus formations cease more rapidly than by any other method, while fever and inflammation subside immediately. He exhibited some patients operated upon a day or so previously, for various serious troubles, whose wounds had healed to a wonderful extent.

Yeast Nuclein in the Treatment of Hip-Joint Disease.—Hitchcock, of Detroit (*American Lancet*), abstracted in *N. Y. Med. Jour.*), reports a case of hip-joint disease in which great improvement and apparent cure followed the use of yeast nuclein. The remedy was used hypodermically, and the site chosen for injection was the region immediately around the affected joint. The first few injections were made daily, afterwards on alternate days. In the beginning twelve minims only were used. Later the amount was increased to fifty. The reaction was moderate, at times some pain and a burning sensation about the site of injection and a moderate rise of temperature. To be of avail the nuclein must be used early. Dr. Hitchcock believes the value of nuclein to lie in its germicidal powers. The preparation used by him was the 1 per cent. solution manufactured by Parke, Davis & Co.

Anti-Venom Serum.—*Nord Medical*, February 1, says: Animals inoculated with Calmette's anti-venom serum, and then exposed to be bitten by venomous serpents, are found to be immune. Until recently no experiments had been made on human beings, but M. Lepinay, of Saigon, reports a life saved with it. An Annamite who had been bitten by a *Naja Tripudians* was inoculated with the Calmette serum an hour afterward and recovered. Calmette is at the head of the Pasteur Institute at Lille.

Cocapyrin in Throat Affections.—Cocapyrin is the name given by Avellis to a mixture of antipyrin and cocaine, in the proportion of 2 grammes of the former (30 grains) to 2 centigrammes (1-3 grain) of the latter. The combination exalts the analgesic effect of the two components. It is administered in the form of pastilles, each containing 20 centigrammes (about 3 grains) of antipyrin and 2 milligrammes (about 1-32 grain) of cocaine, three or four being taken daily and allowed to dissolve slowly in the mouth.

These pastilles act favorably in dry pharyngitis, allaying the pain and provoking free salivation. They are equally beneficial in the pain of acute tonsilitis and that following operations. Employed in this dose, neither antipyrin nor cocaine has any deleterious influence.

The Use of Glycerine for Hepatic Colic.—Dr. Clemente Ferreira (*Bull. Gen. de Therap.*) presents a strong plea for the use of one-half to one ounce of glycerine diluted with water as an excellent resource against the painful attacks. If administered at the outset, it may abort them and even bring about a long cessation of the attacks.

Calomel as a Specific in Diphtheria.—The following is from an article by Dr. Lawrence F. Flick, in the *Medical News*, April 25, 1896: "In the applause for antitoxin, it may not be out of place to call attention to such drugs as can be advantageously and safely used, if not alone, at least with antitoxin, for there remains yet a large mortality to overcome in diphtheria, in spite of the good results from the serum therapy.

"Ever since the modern views about the use of mercury in diphtheria have been advanced, I have used the drug constantly, in some form, in the treatment of this disease. I have usually obtained good results, but also have had failures. Somehow, I have gradually drifted toward the use of calomel, and have come to employ it with rather surprising results. The method which I now follow entirely and with a certain precision, is to give calomel in very minute doses at short intervals. I administer from 1-60 to 1-120 of a grain of calomel, rubbed up with sugar or sugar of milk, every fifteen minutes to every half hour, dry on the tongue. This constitutes an easy and pleasant method of administration. The treatment is kept up day and night until all evidences of the disease have disappeared. The result in my hands has been so magical that I have myself been skeptical many times about my diagnosis. Since I have adopted this method of treating diphtheria, now nearly two years ago, I have not had a death from the disease, nor indeed a serious complication. I fully appreciate the fact, in connection with this statement, that my experience may mean very little, as I have not seen a very large number of cases. I therefore make this report in the hope that the method will be tried cautiously, and condemned if found wanting."

Naphthalin for Oxyurisl Vermicularis.—Schmitz (*Wien. Med. Presse*) employs napthalin for the expulsion of oxyuris, commencing by administering a cathartic. After a few evacuations have been produced the naphthalin is given in eight or ten successive doses of ¼ to ½ of a grain, in powder, four times daily. The drug should not be given after eating, and the ingestion of oils or fats should be avoided during treatment. A week later the same treatment should be repeated, and, if needful, a third course at another week's interval. It is seldom necessary to resort to a fourth repetition.

Ipecac in Biliary Colic.—Dr. Nancy Williams, in a paper on this subject, mentions several cases in which ipecac, 6, quickly relieved the intense pain of biliary colic. Two cases are cited in the *Hom. Recorder*. One patient, a blacksmith, had suffered from attacks for two years. Dr. Williams advised the use of olive oil, and left some ipecac, 6, to be used if the pains recurred. The next attack he took the medicine, which stopped it, and he had no more trouble. In the other case referred to the medicine was used alone, and it also checked the attack, and the patient had no return of it. Dr. Williams adds: "It has always worked, and worked quickly, leaving no unpleasant after-effect."

Rhatany in Rectal Affections.—Dr. Cushing, in the *Medical Century*, states that for thirty-five years he has only once failed to cure pin-worms with rhatany. He found it by proving to produce great itching of the rectum. He mentions a case of anal fissures with bad constipation, in which some three or four dozen rhatany suppositories effected a cure. He thinks that, with the exception of sanguinaria nitrate, rhatany will cure more diseases of the rectum than all other remedies.

Nitro-Glycerine in the Treatment of Sciatica.—Dr. William C. Krauss, of Buffalo, read a paper on this subject before the Medical Society of the State of New York recently held at Albany.

Although skeptical in regard to new measures and remedies, in the face of the abundance of measures recommended, such as electricity, heat, cold, acupuncture, nerve stretching, hypodermic injections, splints, extension, rest, cauterization, not to speak of the innumerable medicinal agents, he however, tried nitro-glycerine and reported seven cases, all of which were speedily cured or greatly benefited.

The administration of nitro-glycerine should be as quickly as possible after the onset of the pain, whether it be neuritic or neuralgic in character, beginning with one minim of the 1 per cent. alcoholic solution and increasing until the peculiar physiological effects of the drug are obtained.

The disagreeable effects of the nitro-glycerine, as congestive headaches, flushing, etc., may be relieved by the bromides.

The author does not claim that it will cure every case of sciatica, but if it relieves 50 per cent., it will be doing what no other single drug has hitherto done.

RETROSPECTIVE DIETETICS.

Dangers of the Lean Meat Diet.—Under the title, "Dietetic Fads," the editor of *Medical Progress* (April 25, 1896) remarks as follows:

"Practical experience, as well as theoretical considerations, lead to the conclusion that a lean meat diet, continued for any great length of time, is incompatible with the highest health. For example, the leading medical teachers in France have for several years been sounding the note of warning against the use of an exclusive meat diet in diabetes, a disease for which lean meat was formerly supposed to be not only highly essential, but almost a panacea. A close study of the history of these cases has shown, however, that an exclusive meat diet is not infrequently a cause of death, through the accumulation of so great a quantity of ptomaines within the body that the overworked kidneys are unable to cope with them. * * *

"Physiological facts which are known to-day fully justify the statement that a person subsisting upon a lean meat diet, however comfortable he may be, however much relieved from various digestive inconveniences to which he may have been previously subject, is nevertheless in a pathological state, and one which is vastly more serious than the conditions which ordinarily arise from the simple fermentation or souring of saccharine or farinaceous foods in the stomach. The acids developed by such fermentations are irritating, and produce more or less disturbance, local and reflex; nevertheless, the ultimate effects are by no means so formidable as those of the insidious but far-reaching and tissue-changing poisons which accumulate in the body as the result of a lean meat diet. * * *

"The truth seems to be that a person subsisting upon a lean-meat diet, while he may manifest a greater amount of strength than upon a more natural dietary, and may be unconscious of any abnormal condition, is like a person in a powder magazine—he is in constant danger of vital catastrophe. The poison-destroying functions of his liver and the poison-eliminating capacity of his kidneys are taxed to their utmost to keep the proportion of ptomaines and leucomaines in the tissues down to a point which permits of the performance of the vital functions. The margin of safety, which Nature has wisely made very large in order to provide for emergencies, is reduced to the narrowest possible limit, so that anything which temporarily interferes with the functions of the liver or the kidneys, or which imposes additional work upon them, may be sufficient to obliterate the safety margin, and produce an attack of grave or fatal disease. Invasion of the body by potomaine-producing microbes, such as the typhoid bacillus, the bacillus of diphtheria, the pneumococcus of Friedlander, the shocks resulting from accident, and even the depression of a severe cold, may be sufficient to consume the meagre emergency capital, and the result is acute inflammation of the kidneys, or death under chloroform or from shock following an operation under anæsthesia. * * *

"It is evidently the duty of the physician who places his patient upon a lean-meat diet, to inform him of the fact that under such a dietary he is living close to the borderline, that his situation is like that of a man walking along the brink of a precipice, that he must on no account submit himself to the influence of an anæsthetic without first undergoing a few days' preparation, including an entire change of diet; and the truly wise physician will further instruct his patient that however a lean-meat diet may be considered as a temporary expedient, it cannot be safely adopted as a continuous dietary without the risk of constitutional degradation and injury."

Starving in Heart Disease.—At a recent meeting of the Berlin Medical Society Dr. Hirschfield read a paper on the nutrition of patients with heart disease. He took the somewhat startling position, in which, however, he was sustained by the approval of many of his hearers, that patients with heart disease, in the stage of imperfect compensation, should take as little food as possible, not even enough to sustain the body weight. It was formerly the custom to give as much nourishing food as possible, with the idea of strengthening the heart. The speaker maintained, however, that in this way too much work was thrown upon the heart, and that the organ was spared and its muscle strengthened by giving very little food, say about a pint and a half of milk a day. Senator, among others, agreed with the speaker in this view.

Infantile Scurvy.—Attention is drawn to this disease editorially in the *University Medical Magazine* for July (*Am. Med. Rev.*). The writer states that, from a sufficient number of cases reported there are indications that the affection is not so rare as formerly believed. He also says that it has been recently shown that proprietary foods, condensed milk, and cow's milk too freely diluted are not the only offenders, but that sterilization or prolonged boiling of new milk of good quality is sometimes an important factor in the development of infantile scurvy.

The diagnosis of infantile scurvy is a matter of some moment, the more so since the failure to institute treatment early is often followed by a fatal result, while, on the other hand, the prompt employment of anti-scorbutic treatment effects a rapid and complete cure. * * * As a rule, symptoms of scurvy are so pronounced when sought for that there is but little difficulty in making a diagnosis when the condition is borne in mind.

On the treatment of the disease there is but one opinion, and that is that the best results are secured by the prompt substitution of "living food," such as fresh milk, fresh beef juice, and orange juice, for proprietary food, condensed milk and sterilized milk.

"The Importance of Precision in the Technic of Hydrotherapy."—* When he made his first plea seven years ago for the employment of the Brand bath in the treatment of typhoid fever, not a single voice was raised in his support. A few days later, however, he received an invitation to instruct the medical staff in one of the divisions of Bellevue Hospital in the technic. Encouraged by the gratifying results that have been obtained since that time, Dr. Baruch has been led to employ water in the treatment not only of acute febrile disorders, such as typhoid fever, pneumonia and the exanthemata, but also in chronic diseases, such as tuberculosis, rheumatism and gout, attended with defective tissue changes or hematosis. The virtue of water as a therapeutic agent resides in its flexibility, inasmuch as by a judicious adaptation of temperature, duration and pressure, it may be applied in conditions of the greatest feebleness and variety.

Among the objections to hydrotherapy have been: (1) The difficulty of applying water systematically and with precision, from the lack of facilities and the natural repugnance to water existing on the part of most persons. (2) The espousal of water as a remedy by empirics and ignorant laymen, who have brought it into disrepute. (3) The utter disregard of an exact technic. The last is probably the chief cause of the indifference of the profession, as failure will surely result from inattention to details. It is a too common error to confound all kinds of cold bathing and sponging with the Brand treatment. It has been definitely ascertained that high temperature is not the chief danger to be feared in an attack of typhoid fever. The object of the Brand bath is the support of the nervous system, with a secondary consideration for the temperature. A longer bath at a higher temperature would also reduce the bodily heat, but it would be lacking in the nervous stimulation. Friction of the body and cold affusion of the head augment the influence of the cold bath, which is appreciable in the improved action of the heart, lungs and secretory organs. To obtain the ideal result a precise technic must be followed. This consists in beginning the friction baths at 65° F. before the fifth day of an attack of typhoid fever, and continuing them without fail every three waking hours, night and day, so long as the temperature reaches 105.5° F. The bathing cannot begin too early, and no harm can result should the case prove not to be of typhoid fever.

The Brand bath may at times serve as a diagnostic guide. Whenever the morning temperature is above 102° F., on the third or fourth day of a febrile disorder, and it rises 1° F. or more in the evening in the absence of a local cause; and a bath at 90° F., with friction for fifteen minutes, repeated in four hours at 80° F. and then 75° F., causes the rectal temperature to fall 2° F. or more, typhoid fever can almost positively be excluded.

In the treatment of pneumonia, and especially the broncho-pneumonia of young children, excellent results have been secured by the use for ten minutes, with friction, of the tub-bath at a temperature of 95° F. gradually reduced to 80° F. during the first bath. Succeeding baths should be repeated at intervals of four hours if the temperature reaches 103° F. or more. In the treatment of pneumonia in adults, the results from this method, and also from the strict Brand bath, have been unfavorable. The following procedure, however, has proved entirely satisfactory. The patient receives first from 10 to 20 grains of calomel, is carefully sponged with soap and water and dried. Two compresses of three thicknesses o old crash or linen toweling or sheeting, wrung out of water at a temperature of 60° F., are applied to the chest, being covered firmly with a flannel bandage. The application is renewed every hour as long as the temperature ranges between 100° and 102° F., and every half hour if the temperature be higher. Free libations of water are permitted, and strychnine is employed hypodermically if the action of the heart is feeble.

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* Dr. Simon Baruch, *Philadelphia Polyclinic.*

The judicious employment of water is also capable of excellent results in the treatment of pulmonary tuberculosis. The object here is the improvement of the nutrition. This is affected by first dilating the superficial cutaneous vessels, by thoroughly warming the patient by a dry pack, *i. e.*, enveloping him in long haired blankets; or by a hot-air bath, short of inducing perspiration. Then he is subjected to a circular or nozzle bath, under a pressure of twenty-five pounds, at a temperature of 95° F., gradually reduced in the course of one minute to 85° F., and followed by a fan douche under a pressure of twenty pounds, at a temperature of 90° F., reduced daily 1° F. If precision in the technic be not observed, and the patient be exposed to lower temperature or subjected to higher pressure at the beginning, the results would be serious and discouraging.

In cases of neurasthenia, atonic and nervous dyspepsia, and simple chlorosis, the results obtained with hydrotherapy, applied with judgment and skill, in improving nutrition and hematosis, are striking. A case of chlorosis may be instructed to stand in a tub containing twelve inches of water at a temperature of 100° F., while an attendant squeezes from a crumpled towel or two bath gloves water at a temperature of 95° F. or less, according to the reactive capacity of the patient, meanwhile rubbing gently the surface of the body. The patient is then dried with a soft linen towel, and subsequently rubbed with a crash towel. The temperature of the bath should be reduced 1° or 2° F. daily until 50° is reached; then larger quantities of water should be poured over the body, by squeezing a large sponge quickly over the different parts. Later, pitcherfuls or basinfuls may be poured over the body with some force.

The Mucous Membrane of the Rectum.—In an article criticising Whitehead's operation for piles, Dr. Edmund Andrews says: "A description of the peculiar mechanism and important functions of the mucous membrane and sub-mucous tissue of the rectum will show that we are not dealing with a simple, smooth, mechanical tube, but a highly specialized organ, which cannot be dissected out and destroyed without doing great and irreparable mischief to the patient. The mucous membrane of the lower inch of the rectum has a peculiar mechanism, constituting it a tactile organ, which is the seat of a very acute special sense, by which a healthy person is warned of the presence and downward progress of the fæcal mass. Its nerves also possess remarkable reflex powers over the sphincter muscles, so that they resist the sudden and unexpected escape of fæces and flatus, without the necessity of a constant mental attention and exertion of the will."—*Mathew's Medical Quarterly, October, 1895.*

Diet During Pregnancy.—A writer in the *Rev. du Their.* thinks many of the ills which accompany parturition are brought about by improper diet during pregnancy. An excess of water and albuminous food should be avoided—water, on account of its tendency to produce hydroamnion, and albumen, because it favors excessive growth of the child.

The following is the diet prescribed, and which has been tried in a number of cases:

Meat once a day, green vegetables and potatoes; avoid eggs, peas and beans, as they are too rich in albumen. Wine and beer may be taken in moderation, but no more fluid should be taken than necessary. The advantages claimed for this regimen are:

1. The patients are active until the eve of their accouchment; they do not suffer from a sensation of fullness, excessive formation of fat, thirst or constipation.
2. Rapid and easy delivery, even in those cases in which the previous labors have been prolonged and difficult.
3. There is never an excess of liquor amnii.
4. All of the women thus dieted have nursed their babies. The quantity and quality of the milk were always good. The children were small, but healthy and well-formed. They averaged about six pounds in weight; the circumference of their heads about 33.4 c.m.

Temperature and Climate.—The *Philadelphia Polyclinic*, in a recent editorial, remarks upon the undue importance often attached to mere numbers, apart from the connection in which they are used, the facts with which they are correlated. Thus it is with the indications of the thermometer, and most especially in regard to the climatic and physiologic significance of atmospheric temperatures. Every one knows that air is colder at zero than at 32° F., but every one, even though he be something of a climatologist, is liable to overlook the fact that the temperature of air takes physiologic significance, chiefly from its density and the amount of watery vapor it contains. An atmosphere is severely cold for any physiologic purpose just in proportion to the rapidity with which it abstracts heat from the body. It is oppressively warm just in proportion to the slowness with which it permits the body to throw off its excess of heat. Hence it is quite possible to have an atmosphere which at 32° will for its general physiologic influences be colder than another atmosphere at the temperature of zero. In such a case the abstract fact is that the temperature of zero is lower than 32° on the arbitrary scale of the instrument, but this is very likely to be made the basis of an entirely false inference, that the zero atmosphere is more severe and capable of causing more markedly the physiologic effects of cold.

To one coming from the comparatively moist, dense atmosphere of the Eastern sea-board, to the dry, rarer atmosphere of the continental plateau, and watching the physiologic effects of the change, the disturbance of the relation between temperature readings and sensations is at first puzzling as it is unmistakable. Yet when all the facts of the case are considered, the reason of the thing becomes perfectly clear. For instance, at Denver, one mile above, the density of the atmosphere is one-sixth less than it is at sea level. Any given volume, as a space surrounding the body, contains one-sixth less air by weight, and on this account one requires one-sixth less heat to raise its temperature the same number of degrees. The body will part with one-sixth less heat in the process of raising its surrounding air from zero to the body temperature than it would in doing the same for similar air at the sea level; or, to put it differently, on account merely of the rarity of the air, the physiologic effect of the one atmosphere, ninety-six degrees below the body temperature will only equal the effect of the other atmosphere, eighty degrees below that point. The temperature of zero in one case will be the physiologic equivalent of the temperature of sixteen degrees above zero in the other.

But an even more important factor in the case is the smallness of the amount of watery vapor in such an atmosphere. The specific heat of the vapor of water is much higher than that of the other gases in the atmosphere. It is upon this vapor that the heat-extracting powers of an atmosphere chiefly depend. The difference in the sensations caused by exposure to an atmosphere of low temperature, according as the air is damp or dry, is a matter of common experience. Yet probably most persons fail to see that this may be due simply and directly to the more rapid removal of heat from the exposed surface in the one case than the other. The "raw," "biting" air, since it gives the same reading of the thermometer, is supposed to owe its unpleasant character in some occult way to the dampness. But no one thinks of it as actually for all physiologic effect colder. The testimony of the temperature sense to that effect is regarded as quite misleading, as a curious instance of the unreliability of our senses. Whereas the temperature sense in its report of the removal of the heat from the body (the only fact with which it is directly concerned) is correct, and it is the thermometer, with its numerical readings and the false inferences drawn therefrom, that is misleading.

That a temperature of zero in a dry, rare atmosphere, may be more pleasant than a temperature forty or fifty degrees higher in an atmosphere saturated with moisture at the sea level, is an observation that many have made. But it has not been so often understood that for simple physical reasons the former atmosphere is really the less severe, for every physiologic purpose, except the actual freezing of parts in which the circulation is in abeyance.

Again, sudden changes in the temperature of the air are commonly regarded as helping to constitute a severe climate—one trying to the health and physically dangerous to the sick. With an atmosphere of a certain density and humidity, the greater the change of temperature the more severe and dangerous that change may be. But on the other hand, the less heat an atmosphere is capable of carrying, the more quickly will its temperature rise or fall, and the greater will be the change produced in the thermometric reading, by the abstraction or supply of a given amount of heat. In this way sudden and great changes in the atmosphere do not make a severe climate, but may rather indicate those qualities of atmosphere that deprive its temperature changes of influence over the body in health or disease, affording a guarantee of a climate physiologically mild.

A "Domestic" Test for Albumin in Urine.—At a recent meeting of the New York State Medical Association, Dr. J. G. Truax read a paper on testing for albumin in urine, in which, after making criticisms on several well-known methods, he proposed in place of these a "domestic" test, which can usually be applied at the bedside, the method being as follows: Pour into a test tube an inch of urine; with a dropper drop carefully upon the surface of the urine half its quantity of alcohol. If albumin be present in the urine a white line will form between the two fluids, the same as in the cold nitric acid test. Another method is to put the alcohol in the test tube first, and drop, as before, the urine into it. If albumin be present in the urine it will be made known by a white wave of coagulated albumin following the urine as it sinks to the bottom of the test tube. The urine, being heavier than the alcohol, will gravitate to the bottom of the tube very quickly. After a small quantity of urine has been added the alcohol will become opaque with the coagulated albumin. This test is so sensitive, says the author, that the one hundredth part of one per cent. of albumin, when present in the urine, can be detected. Mucus will be coagulated if present, and may be mistaken for albumin. Filtering before testing will eliminate mucus; if one is still in doubt any of the control tests for mucus can be made. No other ingredient of abnormal urine will give any trouble, more than when any other method for testing urine is employed. Alcohol, if of the strength of 60 per cent. when clear, will answer every purpose, excepting that of delicacy. A glass tumbler may be used when it is impossible to obtain a test tube.

On Cycling as a Cause of Heart Disease.— Dr. George Herschell writes in the *Lancet*: "The chief danger of cycling lies in the fact that a cyclist takes much more exercise than he is aware of or than he intends to, and is frequently tempted to overtax his powers. This overtaxing of strength may accompany efforts to reach a given point as laid down in plans for the day, or as is made necessary by certain exigencies. More frequently, however, the extra exertion is put forth in hill climbing. In this latter case the heart has already as much strain put upon it as it can stand with impunity; but a glance shows the rider that but a few more turns of the wheel will bring him to the top, and he redoubles his exertions, and the mischief is done. In club runs, again, while the start is made to correspond with the pace of the slowest riders, the faster riders unconsciously quicken their pace, and the slower ones must follow at a rate entirely beyond their capacity or be left behind. Riding with a high gear is a further source of overtaxing the strength. Excessive cycling, by the strain thrown upon the heart, may produce one of four conditions: First, simple hypertrophy. This is a compensatory effort on the part of Nature to enable the work to be performed, and may terminate in recovery, in valvular disease and disease of the aorta, or in degeneration of the heart muscle. The latter condition is the common fate of a hypertrophied muscle. Second, acute dilatation of the heart. This condition begins as soon as the cyclist shows signs of being 'short of breath.' Until this time the blood pumped into the lungs and that pumped out into the tissues is equal in amount; but as soon as this symptom appears there is an inequality in the delivery from the two ventricles, and if exertion is then continued, permanent damage will result. This condition may terminate in recovery, in the production of valvular disease, or in sudden death. Third, chronic valvular disease of the heart. This trouble may arise as a sequel to acute dilatation of the heart, on account of the stretching of the auriculo-ventricular ring. It may arise as a result of hypertrophy from stretching of the aortic ring, from the giving way of a valve, or from the occurrence of sclerotic changes in the valves. Fourth, functional derangement of the heart. This condition is very frequent as a result of cycling. The symptoms are palpitation, dyspnœa, a sensation of sinking at the epigastrium, subjective sensations in the region of the heart, intermittency of the heart's action, and anginoid symptoms. While the above enumerated dangers are constantly present to the cyclist, yet in moderation and under proper conditions, it is one of the most health-giving forms of exercise, and is a potent remedial measure in established heart disease. As preventive measures against the dangers of this fascinating sport may be mentioned: First, the use of a low gear; second, the upright position in riding; third, adequate food when riding and the avoidance of muscle poisons, such as beef tea; fourth, the avoidance of preparations of kola and coca, which numb the sense of weariness; and fifth, on no account should the cyclist continue riding after he has commenced to feel short of breath, or when there is the slightest sense of weariness in the chest.

The First Symptom of Pulmonary Tuberculosis and its Detection by the Fever Thermometer.—As a diagnostic instrument, says Dr. C. W. Ingraham, in the *Medical Record*, the fever thermometer approaches most nearly the zenith of its perfection and utility in cases of suspected tuberculosis. From close observation in a large number of cases, I feel sustained in the assertion that a rise of temperature of from one-half to one degree at some period of greater or less duration every twenty-four hours may be regarded as the first symptom of pulmonary tuberculosis. I believe that this rise of temperature, as a rule, occurs previous to every other symptom, except when tuberculosis follows in the wake of some acute disease without intervening recovery of health. At the very beginning of tubercular involvement, with the formation of the first tubercular nodules, is the most promising period to successfully treat the disease. At this stage the patient raises no infected sputum, which excludes the use of the microscope. The physician is not justified in deciding positively that a disease is non-tubercular until he has before him a complete record of the patient's temperature, showing no recurring daily elevation, for a period of two weeks. An elevation of one-half a degree, occurring daily at some time in the afternoon or evening, should cause a strong suspicion of tuberculosis. An elevation of one degree during a similar period will justify a positive diagnosis of pulmonary tuberculosis, and this diagnosis will in 90 per cent. of cases be confirmed by microscopic examination at a later period. With a fever thermometer and a microscope in our possession, and by intelligent use of the same, we are in a position to render tubercular subjects a most accurate and scientific diagnosis.

Auto-Disinfection: A New Antiseptic.—Not only is it now accepted as a well established fact that the blood is possessed of decided germicidal properties, and that serous secretions are capable of exerting a like protective influence; but it is also true that auto-disinfection is being constantly accomplished in the organism through the agency of mucous secretions, says the *North American Practitioner*. This is notably true with reference to the saliva. The fact has long been recognized by those having care of carnivorous animals that when the wounded ones are permitted to constantly bathe the affected parts with their own saliva—as by instinct they seem inclined to do—better recoveries are made than under any other treatment.

Some very interesting observations, the same journal informs us, have been made recently at the Friburg Hospital, by Dr. Edinger, with a view to determine the source of this germicidal power. He combined with derivatives of quinoline the cyanate of potassium which is found in a considerable portion in saliva and has obtained as a result a rhodanate of methylpyridine, which is found to be possessed of germicidal powers in a remarkable degree. In conducting a series of experiments with reference to its special effects on diphtheria and cholera bacilli and pyogenic microbes he ascertained that a 1:200 solution of this compound kills the cholera bacillus within an hour; a 1:1000 solution kills the diphtheria bacillus within an hour; a 3:200 solution kills the staphylococcus aureus within an hour. The same result is obtained by exposing during 10 minutes, the cholera bacillus to the action of a 1:200 solution of this rhodanate, the diphtheria bacillus to a 3:200 solution and the staphylococcus aureus to a 2:125 solution. To kill the same microbes in a minute, a 3:1,000 solution is required for the cholera bacillus, a 9:1,000 solution for the diphtheria bacillus, and a 3 per cent. solution for the staphylococcus aureus. Cultures of the comma bacillus are prevented by a 1:10,000; of the diphtheria bacillus by a 51.10,000; and of the staphylococcus aureus by a 1:4,000 solution.

It is evident, therefore, that in this substance we have a newly discovered and energetic antiseptic. The discoverer states that it is not in the least caustic, and has the advantage over carbolic acid in being entirely nonpoisonous, and thus free from the objection which holds against the use of bichloride of mercury. It is quite possible that in this rhodanate we may have come upon a new antiseptic agent of inestimable value. Its claims will soon be fully investigated, and if the statements made shall be verified, as its applications are unaccompanied by pain, it can in many ways be turned to practical account. The rhodanate of quinoline is already being used in the treatment of gonorrhœa, and as this remedy is far more potent and perfectly harmless, its usefulness can only be measured by the results which it can accomplish.

Inorganic Cardiac Murmurs in Children.—The *Presse Médicale* for December 25th, contains an abstract of an article which was published in the *Revue des Maladies de l'Enfance*. The author shows that, in children as well as in adults, a cardio-pulmonary murmur may exist which is independent of all organic lesions. This murmur does not appear until toward the age of three years and a half, and its frequency then increases progressively up to the twentieth year. The author has demonstrated this fact by his researches, which include almost four hundred observations. The diagnosis of cardio-pulmonary murmur presents considerable importance, he says, as it does away with the fears which the symptoms of organic lesions of the heart always give rise to. The rules laid down by Prof. Potain to establish this diagnosis in adults are, says the author, applicable to children. The appearance of the murmur seems to be favored by some diseases, such as chorea, scarlatina and rheumatism, while other affections, such as pneumonia, diphtheria and whooping-cough, seem to have no influence whatever.

Diagnostic Nervous Manifestations of Syphilis.—Dr. J. Allison Hodges, in concluding a paper recently read before the Richmond Academy of Medicine and Surgery, gives the following:

1. Headaches, which disappear if paralysis occurs.

2. Insomnia, nearly always associated with headache, and disappearing with the appearance of convulsions or paralysis. It differs from the insomnia of neurasthenia and melancholia in that it occurs in the early night, the victim arising in the morning ready for his daily labor.

3. Vertigo, occurring usually with the headache. It may be transient, but becomes worse as the disease progresses.

4. Tremor, present in one-half of the cases. It occurs most often in the order named: In the hands, tongue, and over the whole body, and is accompanied by headache. If it occurs in a limb it is the precursor of paralysis of the limb.

5. Hemiplegia.

6. Erratic distribution of paralysis, as aphasia with or without hemiplegia, ptosis, insanity or epilepsy, with paralysis of one arm or leg. It is suggested that ptosis occurring suddenly points nearly always to syphilis.

7. The use of electricity to determine central or peripheral lesion.

8. The presence of great weakness and mental dullness. This is one of the most valuable of the nervous manifestations, being out of proportion to the seeming condition of the patient.

9. History of the case. In women the history of many abortions in succession would point to syphilis.

Poisoning by Flutes.—Dr. J. H. Smith, in a paper read at a meeting of the Homœopathic Medical Society of Massachusetts, reports several cases of "flute poisoning." Grenadille, or cocus wood, has for many years been employed in the manufacture of this musical instrument, inasmuch as it gives a brilliant and powerful sound, which mellows and becomes more flexible with the age of the instrument. Dr. Smith says: "There is most trustworthy testimony from Germany, England and America to the fact that cocus wood, and no other material, is found by certain susceptible flutists capable of producing serious irritation of the lip, necessitating the use of a crescent-shaped silver or gold lip-plate, shellacked to the mouth-hole or embochure." The author describes the malady as a lip excessively swollen, extremely red, with large blotches covered by vesicles. Relief is had by the application of nitrate of lead in water, 1 to 2,000.

Removal of Blood Stains.—According to Dr. Blenkiser, in the *Scalpel*, surgical instruments, sponges, the hands of the operator, and other blood-stained articles, may be readily cleansed by washing them in a tepid solution of tartaric acid, and then rinsing in water without soap.

The Practice of Medicine in China.—The work of the Chinese practitioner begins at daybreak, when he receives his office patients. At ten o'clock he is carried in a sedan chair to visit his patients. On the door of his house, the sick one hangs a card bearing the name of his own physician, a necessary precaution, as all the houses are similar and are not numbered. The doctor is received with profound respect. He is offered tea, and a pipe, and then is invited to feel the pulse of the sick one. If it be a man, the doctor seats himself in front of him; if a woman, a bamboo screen is placed between them, which is, however, withdrawn when it is necessary to examine the tongue. The left hand of the patient is extended upon a book, the doctor lays the three first fingers of his right hand upon the pulse, tries it with each finger separately, then with all three he presses firmly upon the artery and counts, without a watch, the number of pulsations. This accomplished, the patient presents his other hand, and the performance is repeated.

After asking questions of the sick one concerning his illness, the doctor calls for pen and paper to write his prescription, the principal ingredients of which are of the vegetable kingdom.

If the patient be a mandarin or person of high rank, the physician writes out the nature of the sickness, the prognosis and the treatment, and receives as honorarium about ten francs ($2 50). But often the family and friends are satisfied with just a verbal communication.

The charges for a visit vary generally according to the pecuniary condition of the patient.

The money paid is wrapped up in a red paper, and when the patient is especially grateful, in a gilt paper.

The doctor does not make a second visit, except in very serious cases, and if he is requested to do so.

If the recovery does not proceed rapidly, a second physician is called in, then a third, a fourth, a fifth—until the family, tired of seeing doctors, call upon the aid of some divinity endowed with the virtue of healing.

But it is all useless.

Generally speaking, the visit of the first doctor is quite enough to send the patient into the kingdom of Confucius.—DR. M. DE T.: *From the Journal d'Hygiene, Paris, Nov., 1895.*

MISCELLANY.

—Chicago has seventeen medical schools. No wonder it is called the "Windy City."

—Dr. Phillips recommends the ligation of the dorsal vein in cases of atonic impotence.

—Courage, cheerfulness, and a desire to work, Moleschott says, depend mostly on good nutrition.

—By a recent act of the Connecticut Legislature, the marriage of epileptics in that State is forbidden.

—Preserve and treat food as you would your own body, remembering that in time food will be your body.

—The Shah of Persia has selected as his family physician Dr. William S. Vaneman, of the University of Pennsylvania, 1888.

—Health Officer Doty, ever alive to his duty, has gone to Havana to take measures to prevent the exportation of smallpox and yellow fever to this city.

—The French Academy reports the case of a fœtus having been retained fifteen years, an attack of peritonitis being the only inconvenience experienced.

—Half a drachm of carbonate of ammonia in a wineglass of water is said to be a prompt emetic and sobering restorative in cases of alcoholic intoxication.

—Prof. Vergely, of Bordeaux, heals burns by applying a paste of calcined magnesia, made with water, and allowing it to dry on the skin, removing it when it peels off.

—It is claimed that hypertrophy of the left ventricle occurs in normal pregnancy, and that a certain amount of dilatation of all the chambers of the heart also occurs.

—Dr. Albert Hoover two months ago was lying upon a couch. One of his children playfully walked over him, but, making a misstep, trod upon his testicles. The bruise led to abscess, pyæmia and death.

—Acetylene is being tried as an illuminant on the Paris street cars. Though the weight of the gasgogene when charged is only twenty-seven pounds, it is capable of producing thirty-five cubic feet of the gas, the illuminating power of which is estimated at fifteen times that of ordinary coal gas.

—Electricity, as reported by Dr. M. G. Jenison, of Minneapolis, in the *Ohio Dental Journal*, has been successfully employed by him in checking hemorrhage from the extraction of teeth. The current caused instant coagulation of the blood, and gave relief where the usual remedies were without effect.

—Thirty-eight centenarians were recorded in Great Britain last year, fifteen men and twenty-three women. The oldest was Mrs. Henry, of Gortree, who died at 112, leaving a daughter of 90. In the last ten years the *St. James Gazette* has kept track of 378 centenarians, of whom 235 were women.

—Dr. Seibert, of this city, advocates the filtering of milk through cotton. He finds that the oily globules pass through the cotton, while about three-quarters of the germs do not. The conclusion is that filtration is as good as sterilization, while the objections to sterilization of milk are thus removed.

—Street Cleaning Commissioner Waring attributes to the clean streets of the East Side the complaints of the druggists there that their business is dull. Every paved street is cleaned now at least once a day, 260 miles are cleaned twice a day, and because filth is not allowed to remain there is no danger to health.

—Dr. Burton Ward declares (*Medical Age*) there is one infallible symptom indicating whether one is sane or not. Let a person speak ever so rationally and act ever so sedately, if his or her thumbs remain inactive there is no doubt of insanity. Lunatics seldom make use of their thumbs when writing, drawing or saluting.

—Dr. Blindermann, of Germany (*Pract. Med.*), says it is possible to make a differential diagnosis between ulcer and cancer of the stomach by an examination of the blood. The difference is that in cancer there is a steady diminution in the proportion of hæmoglobin.

—In a theatre in Odessa there was lately a very unusual representation. The play was the production of a physician, and had as its title: "The Hypnotic Suggestion, or the Vengeance of a Woman." The actors and the musicians of the orchestra were all doctors of medicine. The audience was composed of convalescents.

—Count Mattei, "the champion quack of modern times," must have done an enormous business. Dying recently at Bologna, he has bequeathed 2,000,000 lire ($400,000) to charities, while the bulk of his fortune descends to his adopted son and heir, Mario Venturoli Mattei, to whom he has also left his "segreto miraculoso."

—A member of a Zurich medical society recently exhibited a self-registering clinical thermometer, on which there were no degrees marked. The instrument could be left with the patient's family to take the temperature in the absence of the physician, and the latter could then read it by means of an attachable scale of glass or metal.

—Dipsomania may be occasioned by traumatism. The *Presse Medicale* (*Med. Cent.*) reports a case occurring in an officer who was thrown from his horse and dragged some distance, injuring his head and wounding the nucha quite extensively. An excessive thirst for alcohol developed. He also became erotic, and manifested a suicidal tendency.

—The bladder, when partially paralyzed, from parturition or any other cause, can always be made to empty itself perfectly by throwing a large amount of very warm water into the bowels, thereby doing away with the necessity of using the catheter—a most important consideration, particularly when the patient lives at a distance from the doctor.

—It is said that Dr. Carver, of St. Augustine, Fla., is living in the oldest house in the United States. It was built in 1562, and was occupied by Spanish monks before St. Augustine was founded. In the house Dr. Carver has surrounded himself with a collection of antiquities connected with the history of Florida and its Spanish rulers that is in itself a veritable museum.

—A white tongue (*Med. Age*) indicates febrile disturbance; a brown, moist tongue, indigestion; brown, dry tongue, depression, blood-poisoning, typhoid fever; a red, moist tongue, inflammatory fever; a red, glazed tongue, general fever, loss of digestion; a tremulous, moist and flabby tongue, feebleness, nervousness; a glazed tongue, with blue appearance, tertiary syphilis.

—It is easier for an American to get the degree of Ph.D. at most of the German universities than it is for him to get it at any one of the dozen or more American universities of the highest grade. In Germany it is the lowest degree given, hardly more than equivalent, if, indeed, it is equivalent, to our Master of Arts. Yet many among us, who care little for their A. M., would be proud to flourish a Ph.D. from a German institution.

—A French statistican has discovered that in the sixteenth century the average duration of a doctor's life was only thirty-six and one-half years. In the seventeenth century it reached forty-five and two-thirds years, in the eighteenth forty-nine and two-thirds years, and at the present time he finds it is fifty-six years. The same inquirer proposes to ascertain whether the average longevity of patients has increased in the same proportion.

—A process has been patented in Germany for making a substitute for the natural skin for use in wounds. The muscular coating of the intestines of animals is divested of mucous membrane, and then treated in a pepsin solution until the muscular fibers are half digested. After a second treatment with tannin and gallic acid, a tissue is produced which can take the place of the natural skin, and which, when laid on the wound, is entirely absorbed during the healing process.

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ORIGINAL ARTICLES.

DOCTORS OF OTHER DAYS.

By JAMES ROBIE WOOD, M.D., NEW YORK.

UPON my office wall there hangs an old parchment—the medical diploma conferred upon my father by Harvard College in 1829.

A glance over the distinguished names written thereon awakens many strange memories. There is hardly one among those whose signatures adorn that old diploma who has not made a marked impression upon this century, either for good or evil.

He who leads the list has left a pleasant sunshine behind him; yet but very few among the millions who have felt its genial warmth ever knew from whence that sunshine came. Next below is written the name of one who cheerfully sacrificed the rest of an easy grave in order to overcome a stupid prejudice which had for ages retarded the progress of medicine and surgery. The third whose name is transcribed there was the Professor of Legal Medicine—Walter Channing—of whom I know but little. The fourth was a sterling representative of the medical profession—one well fitted to guide young physicians; for he, more earnestly than any other teacher of his day, warned his students against the folly and danger of being mere prescribers of drugs. The last person who signed that old parchment made two continents shudder with horror a half century ago. Often as I have looked upon his signature, memory has caused the ghostly presence of his crime to appear.

One other name, the most important in giving the sanction of Harvard College to the young aspirant to go forth upon his chosen career, need be only mentioned, as most Americans know of him and his father; both bore the same baptismal name—Josiah.

Josiah Quincy had just been promoted to the Presidency of Harvard College in that year, 1829, so his signature upon this old diploma was among the first ever written by him as President of that institution.

Returning once more to the faculty of the medical branch of the college let me first consider that dear old man—Dr. James Jackson, Professor of Theory and Practice, whose name heads the list. I well remember him in extreme age, one winter's day, warmly clad, quietly plodding along the streets of Boston; a fur cap covered his fine old brow and thick woolen socks were drawn over the bottoms of his trousers to encourage the lagging blood to warm those feet which had spent so many useful years in carrying that noble physician to many thousand bedsides, where he always left a benediction of knowledge, kindness and zeal. His modesty forbade bitter personality in the contest of his own and Morton's friends, who were warmly urging the priority of their respective candidates in the use of ether. When it was proposed to erect a monument to the one who first used the great anæsthetic in medicine and surgery, a wag suggested that the difficulty be settled by inscribing on the marble —"*To Either.*"

Another mighty offering from science to mankind was made through this devoted physician without his demanding the slightest recognition or a share of the honors which were freely given to others. While traveling together on shipboard Jackson and Morse met. Morse told Jackson of his labors and failures while attempting to convey messages by electricity. Jackson related his trials in the same line of experiments and corrected faults in Morse's system. Morse profited by these instructions, which soon enabled him to perfect the telegraph. Jackson was as indifferent to glory as it was possible for flesh and blood to be. This modest, true and diligent man loved science for its own sake and for its power of rendering benefits to humanity; and he was ever happy amid its most mysterious and intricate problems. His heart freely gave rich treasures from out of the vast storehouse of his wide and generous mind.

Next to Jackson's name appears that of John C. Warren, who was Boston's greatest surgeon in those days. On account of the constant difficulty of procuring the dead for dissection, through a narrow popular prejudice, he commanded that upon his death his own body should be dissected and his bones hung in the college museum for the benefit of science, and to overcome public aversion to this most necessary means of instruction. His directions were strictly followed, and there the honored skeleton of that most distinguished surgeon has swung for many years. The eyeless sockets beneath that brow seem to demand that science should unite her prayers with those of Jewish and Christian churches for the eternal repose of that noble soul which had so generously denied even the rest of the grave to its earthly tenement, so as to enable man to acquire a better knowledge of the human body in order to lessen the ills of his fellows.

Dr. Warren was a proud but just man. This was well illustrated by the following incident:

During a clinic he called a number of students to the operating table to examine a peculiarity in the case. All solemnly gazed through the august professor's eyes and reverently saw what he thought he saw, until the last one approached the case. He was an earnest worker, but generally very timid. It was simply impossible for this quiet student to see what the impatient teacher described. "But,' said the young man, "I do see the evidence of another trouble which may account for the condition; whereupon he explained his views. This dreadful thoughtlessness frightened the student himself, but his presumptuous suggestion caused a more thorough examination of the patient to be made, and to his chagrin the doctor was obliged to humble his pride for the nonce and acknowledge his error. Until after this student's graduation Warren would not notice or speak to the unfortunate transgressor; but when appointments were made for the hospital, the professor himself, whose dignity and pride had been so sorely offended, saw to it that the young man should have the best position within his gift.

Lower down in the list is written the name of Jacob Bigelow, who was a teacher well fitted to prepare young men for their medical career. In his efforts to guide his students aright he never wearied in warning them to avoid the careless or needless use and abuse of medicines. He was fond of beginning his course of lectures on materia medica with the following humorous remarks:

"*Remember, young gentlemen, that man is a drug-loving and drug-taking animal, and it is your business as physicians to keep them from him.*"

A later professor in the same college, one whose intense wit has made the whole world smile with pleasure, Oliver Wendell Holmes, supplemented Bigelow's words with the sparkling satire:

"If all the medicines in the world were thrown into the Atlantic Ocean, it would be *better* for mankind and *worse* for the fishes."

A sadder task awaits me now. He whose signature stands last upon that time-stained medical diploma, was the Professor of Chemistry. The mention of his name to-day causes many old men and women to pity that poor man who, half a century ago, shocked millions in Europe and America by his appalling crime. The murder of Parkman by Prof. Webster, and his subsequent attempts to destroy the body by fire and chemicals, and his last, but futile, effort to hide that ghastly evidence of his deed under the waters of the Charles River, was at that time one of the most fearful records in the annals of crime. It was made especially hideous by the refined surroundings of the murderer. A cultivated man of high character, with a charming family and excellent social circle, and, especially, his honorable position as professor in one of the most noted educational institutions of this country, all these combined advantages which ought to have been an absolute protection to him.

His life should be a warning for young professional men of slender means to beware of the dangerous habit of contracting debts. To-day there are far too many allurements for young men to purchase this or that valuable medical or art work, to be paid for on easy installments. Sixteen chances to one he could just as well do without *the so-called valuable work* thus ably presented and extolled by glib-tongued book agents. Far better is it to gather a library by selecting absolutely necessary books only and paying cash for them one by one. An unwieldy library is poor property for a young physician, especially if it be the means of keeping him in debt.

Webster owed Parkman, and being utterly unable to pay the money at once, the lender's constant duns had worried him exceedingly. The probability is that on the last visit made at the laboratory Parkman was very harsh and irritating while demanding his money. Webster, being already nearly crazed by financial straits, became for the moment frenzied; then a single blow with a heavy stick caused a death which probably was never intended. Imagine the horror of that moment when he realized what he had done. Who can have any conception of the bitter terror of those days before suspicion fell on him? The gallows must have been a welcome respite for his anguished mind. The law, in all probability, would have been more merciful to him had he instantly declared his deed and his innocence of premeditation. Unfortunately his many subsequent attempts to destroy the evidence of his guilt locked all doors of a possible good legal defense.

The plain lesson of his act teaches us to avoid the occasions of evil, above all, *debt*, as that has been the roadway to a vast multitude of crimes.

PRUNUS VIRGINIANA IN BRONCHIAL COUGH.*

By George Frederick Laidlaw, M.D.,

Lecturer on Pathology in the New York Homœopathic
Medical College and Hospital; Pathologist
to the Hahnemann Hospital of
New York, etc.

MY first acquaintance with the drug under consideration, prunus virginiana, came about when I was searching for a remedy to cure an obstinate cough that had resisted the indicated remedy prescribed in the usual manner. The patient was a girl, aged twenty years, and of delicate constitution, who presented the usual signs of having "taken cold," commencing with coryza, and, after a few days, passing into a cough with scanty expectoration and soreness under the sternum. The cough was persistent and annoying at all times, but most troublesome when lying down at night. On examination, percussion was negative, but auscultation revealed coarse rales in the larger bronchial tubes of both lungs, indicating a catarrhal bronchitis.

As is my usual habit, after several homœopathically-chosen remedies had failed to relieve the condition, I searched all available literature for suggestions or remedies that would benefit the patient. During this investigation, in a book devoted to the botanic system of medicine, I found prunus virginiana recommended for dry cough. I procured some of the prunin, as it is called, and gave the prescribed dose of one grain every two hours with the most happy results. In forty-eight hours the cough was materially improved, and at the end of a week the cure was complete. A few months later, on the occasion of a fresh cold, with the same troublesome symptoms, the prunin made a prompt cure.

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* Read before the Homœopathic Materia Medica Society, February, 1896.

For the cure of those bronchial coughs that are aggravated by lying down, our materia medica offers several drugs, among which are hyoscyamus, conium, arsenic and rumex. I have prescribed these drugs frequently on this indication, and, with the exception of a case cured by conium, in the second trituration and two cases cured by rumex in the third dilution, I have met with no success whatever in their use. On the other hand, I find that prunin is a very reliable remedy in such a cough, and prescribe it with the utmost confidence. The reason for this aggravation on lying down is as yet an unsolved problem to me. It is variously explained, as a change in the position of the liver with consequent pressure upon the lung, and also as a change in the position of the mucus in the bronchial tubes, neither of which explanations seem adequate.

There is another form of bronchial cough in which prunin is serviceable, and that is what I may term the spasmodic or asthmatic form. There is considerable wheezing and dyspnœa, and the coughs come in groups of five or ten. Physical examination shows an abundance of whistling rales, with here and there an area of fine subcrepitation. A feature that I have noticed is that the dyspnœa comes on especially after coughing. During the attack of coughing, each breath is a peculiar dry wheeze that can be heard across the room. This cough and dyspnœa are apt to be worse at night and on lying down, so that the patient is compelled to sleep propped up in bed, if he is so fortunate as to sleep at all. Here prunin, in doses of one or two grains every two hours, will often work a prompt and permanent cure.

As to the limitations of the drug, prunin will not cure the cough of phthisis, though it will at times mitigate its severity. There are cases of chronic bronchitis dependent upon a pituitary constitution or upon organic diseases of the heart or kidneys, and these prunin will not cure, though one old school author recommends the syrup of prunus virginiana as an efficient palliative in the bronchitis of heart disease. On the other hand, in the persistent cough that follows the grippe or influenza, which is notoriously difficult to cure, prunin has often succeeded in my hands when other means had failed. In the height of an attack of grippe, prunin is of less value than in the sequelæ.

Prunus virginiana is altogether neglected by our Homœopathic text-books and meets with scant consideration at the hands of the "Allopathic" or empiric school. It is true that the syrup of prunus is very largely prescribed, but it is regarded as a mild digestive tonic or as a pleasant-tasting vehicle for cough mixtures, rather than as a drug with a specific curative power of its own. This is probably because the syrup does not represent the full virtues of the plant. The best preparation of the drug and the one with which most of my experiments have been made is called prunin. It is manufactured by B. Keith & Co., of this city. Prunin is what the makers call a "concentrated remedy," that is, a remedy in which the alkaloids, resins and other active principles have been extracted separately from the crude plant and then recombined in definite proportions; whereas, as is well known, in the crude drug the relative proportion of the principles varies according to the season of the year and the locality in which the plant is gathered. This mode of preparation has seemed to me of value; at least, I have obtained better results from this preparation than from the ordinary tincture, fluid extract, syrup or infusion. I was once called to treat an elderly lady for a chronic cough and found that she was in the habit of using a fresh infusion of wild cherry bark (prunus virginiana) to relieve the cough. She had been taking it for some time without relief. When I gave her prunin the cough improved immediately and was finally cured. The explanation of the failure of the infusion lies in the fact that the active principles of prunin are three in number, a neutral principle that is soluble in water, a resinoid and the so-called amygdalin, that are insoluble in water, but must be extracted by other solvents. The combination of the three principles accomplished results that could not be obtained by one of them alone.

In the use of these active principles, there is one point which must always be borne in mind, and that is that most of them are soluble in alkalies but are insoluble or entirely destroyed by many acids. The most destructive acid is lactic, which is often present in the stomach, and must be neutralized by the administration of an alkali simultaneously with the medicine. Practically it is impossible to determine whether or not the stomach contains sufficient lactic acid to interfere with the drug; therefore I always administer an alkali with each dose of prunin. The alkali may be a small glass of vichy or seltzer, or ten grains of bicarbonate of soda or Rochelle salt. Tartaric acid does not seem to neutralize the drug.

SCOLIOSIS.

By Otto Scherini, D. G.

Masseur and Medico-Gymnast, of Stockholm, Sweden.

DEFINITION.

EVERY permanent curvature of the vertebral column is a scoliosis. There are two kinds of scoliosis, namely: "Scoliosis muscularis" and "scoliosis ossicularis." The disease begins either in the muscles or in the bone apparatus. If it begins in the vertebral column itself, and is not properly attended to, the muscles also soon will be affected, and *vice versa.* Then the secondary stage has set in. In the third stage the fibrocartilagines intervertebralis become ossified.

SYMPTOMS AND CHANGES.

It is very difficult to notice the scoliosis at its first beginning, it comes on so very gradually. It is, however, of great importance for a successful result of the treatment, immediately to begin to attend the case at the very least sign. The slightest dissymmetry between the shoulders or hips should be carefully studied. It may depend on mechanical or other causes, and the shoulders and hips may have an abnormal position without a beginning of scoliosis.

As soon as a curvature is visible in any part of the spinal column, the scoliosis is in its first stage. It is characteristic of this stage that the one afflicted is able to hold his back straight by will power ; that is, for a short while at the time being. In horizontal position the column also straightens out. The curvature is now pathological, and there is no reason to think it is only a tendency to scoliosis.

A primary curvature will sooner or later be folfollowed by another—a compensation-curvature. When this latter curvature is developed, the scoliosis has begun its secondary stage. The curvatures form similar to a letter S. Sometimes curvatures will form in the regions of the neck and sacrum, although the bend always is more distinct in the dorsal region. Characteristic of the secondary stage is the turning of the vertebræ around their pivot, with their bodies towards the convex side, and their proc-spinosa towards the concave side of the column. With a permanent curvature and turning of the vertebræ will also follow a change in the shape of fibrocartilagines intervertebralis, and also a change in the position of the ribs, clavicles and scapulæ. When this deformity is developed, the scoliosis is in the third stage, and will develop still more if it is allowed to take its own course. The time a curvature takes to develop is variable, depending on individuality and various other circumstances, as to quality of substance in cartilage and bone, condition of muscles, habits, etc., etc. On the degree of the curvature depends naturally the extent of the other deformities. When the spinal curvature develops and increases it causes a wedge-formed change, at first in fibrocartilagines intervertebralis, and afterwards in the vertebræ themselves, the reason being the continual pressure. The greatest deformity will appear in the middle of the pathological curvature, and decreases towards the ends. With the curvature must follow a change in the normal position of the ribs. On the convex side they are pushed out, and spread, and the vertebral ends are flattened. On the concave side they come closer together. It has happened, though rarely, that they have grown together. The shoulder blades acquire an abnormal position. On the convexity the shoulder blade is pushed up, on the concavity it is too low, and seems also to be pressed forward.

In scoliosis there are pathologic-anatomical changes in the muscles, but they appear to be very different. It is of great importance in the treatment to closely watch for such changes. The muscles on the concave side very often show a certain hypertrophy, on the convex side real atrophy. The muscles on the convex side are in a state of unnatural extension, pale in color, with poor nutrition. On the concave side they are shortened (wrinkled together), tensile, of good color, and with normal nutrition. The highest degree of this deformity is called paralytic thorax. Then there are not only the before mentioned changes in bones and muscles, but changes and functional irregularities in the organs of circulation, respiration and digestion.

The general health seems not to be affected in the beginning of scoliosis, and sometimes it keeps good even when the disease has reached a high degree.

Many believe and imagine that scoliosis in the first beginning will get well by itself, but that is indeed a serious mistake. Experience shows that if a spinal curvature has once made its appearence it has come to stay, and will develop. The disease has a great help in the laws of gravity, and also in the habits of taking improper poses when standing, sitting, etc.

CAUSES.

Hereditary Disposition.—If hereditary disposition exists, the scoliosis develops very easily, not alone in cases of weakness, but also in persons having a strong constitution. There are instances when grandmother, mother and daughter all have suffered from the same form of scoliosis. It seems the hereditary disposition is much more prevalent among the gentler sex. Dr. Eulenburg attained the following result out of 1,000 scoliotic cases diagnosed ; 254 were hereditary, and of those 249 were from the mother, and only five from the father.

Rachitis.—This inflammation of the spine, chiefly resulting from an insufficient nutrition, often results in scoliosis. It changes the structure and form of the bone apparatus. Through too much organic substance the bones have an abnormal flexibility.

Weakness of Muscles is sometimes the cause, but then it must be in combination with other causes. Muscular weakness, howevér, will certainly increase the disposition to scoliosis.

Pueritic Exudation is, in several, cases a direct cause. But this, and other special reasons, may be considered as exceptions.

Inflammation of Muscles.—If the muscles on one side are affected with pain (rheumatism), the one suffering tries to keep those muscles rested as much as possible, in order to avoid pain. After some time it happens that a curvature will appear with the concavity toward the healthy side. Of course, this is an exceptional cause.

Contraction of Muscles.—There are two kinds of pathological muscle contraction. One is a permanent but tensile contraction, and sometimes a primary cause. By an abnormal energy of the nervous system, a tensile contraction of the muscles on one side will take place and cause a deviation of the spinal column. The other is a retraction (not tensile) of the muscles on one side, and is sometimes the cause of a curvature.

Debility and Extension of Muscles. Here is an important question concerning the pathogenesis of scoliosis. It is a physiological truth that in order to have the spine properly balanced, the muscles on both sides must have the same tenacity. If a sickly debility exists on one side, and the muscles of the other side are healthy, it follows that the spinal column will curve with the convexity toward the side of the diseased muscles. The S-formed scoliosis seldom appears before the sixth or eighth year, with the upper convexity to the right and the lower to the left. The convexities, *vice versa*, are exceptions.

Observe the back (naked) on a person sitting at a table writing; the right arm and elbow are extended from the side, while the left arm is close to its side, the back is bent in the dorsal region with the convexity to the right. It is plainest seen in weak persons, and sometimes even a double bend may be observed. This is very often the position of pupils in different schools, and can at any time be seen. This temporary and physiological curvature will often cause a scoliosis, although the back is generally able to submit to the unnatural position for some time. A certain pose will readily become a habit, and when once a habit Nature will give in. A proof that this is one of the most common causes, is that scoliosis was never observed among uncivilized nations.

PREVENTION.

As long as there is a good equilibrium of the muscles on both sides of the back, there is no danger of scoliosis. To prevent the deformity is wholly dependent on keeping this equilibrium. It can be done in a negative way, by avoiding wrong positions when sitting or standing, and in avoiding one-sided movements. It can furthermore be done by proper hygienic means, viz., sound food, fresh air, cleanliness, and a suitable amount of exercise. Scoliosis was never yet observed where proper gymnastics were used from childhood.

Where there is no opportunity of securing proper gymnastic exercises, such can be taken at home. The following active exercises might be safely recommended:

Arm spreading and closing; arm raising upward and sinking sideways; forward lying trunk raising; standing (arms stretched upward) high-stepping; abdominal exercises; arm bending and stretching upward and sideways; neck firm standing trunk-turning, arm swinging, etc. These movements can be taken in any home.

Scoliosis is more common among the working class, their children having less opportunity of receiving proper gymnastics.

The orthopedic as well as the gymnastic treatment is used for scoliosis. The orthopedic is the older, but is not used as much as it was, owing to the success of the gymnastic treatment.

TREATMENT.

If the muscles on the convex side are weakened or have undergone a pathological change, and the muscles on the concave side are normal, or perhaps only have a slight change in the nutrition, it is natural that the muscles so changed must be put into a normal condition. That cannot be done by mechanical extensions. To gain the desired result there are only two ways; muscle movements and electricity.

To straighten a curved spinal column extensions have to be used. The question is then: Are mechanical appliances necessary for these extensions, or can they be done with help of the organism? In mild forms of spinal curvature, where the vertebræ are not deformed, the spinal column is straightened by each extension of the back. In bending towards the convexity the spinal column will not only become straight, it can even be bent towards the other side, showing an extension of high degree. No mechanical contrivances will effect an extension as well as proper active gymnastics. The treatment is simple. The equibilibrium between the muscles of both sides must be restored. The muscles on the convex side are weakened and sickly, and must be brought back to their normal condition. If the convexity is to the left (being the usual case), bending is done to the left with support of the operator's hand on the highest point of the convexity. The muscles of the left side are then put to work, while those on the right side only are passively extended. The neck-firm position (clasping the hands in the back of the neck) increases the value of the bending movement.

Neck-Firm-Standing, Side-Bending, with Side Support.—One hand of the operatoı is placed on the highest point of the convexity, the other hand on the opposite hip. The bending is done slowly, but strongly, and is repeated several times. It can be given by one operator, but is stronger and more beneficial when given by two. This movement can also be taken in sitting position.

Side-Lying Trunk Raising.—The patient is lying on side with legs only, the feet are held down by the operator, or a strap may be used—on a lounge or other apparatus, which would serve the purpose, with the convex side up. The bending is done upward. The hands of the patient are placed on the hips (hips firm), or neck firm, when the patient is sufficiently strong for such a position. If one shoulder blade is lower than the other, use neck firm only, with the hand of that side. These two movements may be considered to be the foundation for treatments of single scoliosis. After some time they are easy to take and not very trying. The spinal column is receiving a constant extension. Between the movements the patient should be resting in a perfectly horizontal position.

EXAMPLES OF MOVEMENTS IN TREATING SINGLE SCOLIOSIS.

Arm extensions upward and sideways; neck firm standing; side bending, with side support; hanging head, bending and stretching; side-lying trunk-raising; neck firm heel raising with side support, etc.

EXAMPLES OF MOVEMENTS IN TREATING DOUBLE SCOLIOSIS.

Support standing arm extensions; stoop sitting trunk-raising, with double support; hanging head-bending with double support; hanging leg-spreading; side-lying arm extension with double support, etc. After every movement arm spreading and closing.

The virtue of the treatment does not consist in a great number of movements, but in using good judgment in applying them, and in observing external indications. Between the treatments a corset or brace may be used for support, in the beginning. When the fibrocartilagines intervertebralis once have become ossified, this or any other treatment cannot help—but medico-gymnastics properly applied will always tend to straighten the spinal column, and strengthen the muscles of the back.

ŒDEMA OF THE LUNGS.

A CLINICAL LECTURE BY PROFESSOR POTAIN, DELIVERED AT THE HOPITAL DE LA CHARITE, PARIS, FRANCE.

Translated by F. H. Pritchard, M. D., Weaver's Corners, Ohio, with Remarks on the Differential Diagnosis and the Modern Treatment.

YOU have noticed in the Bouillaud Ward a man who for about fifteen days, without accompanying fever or pain in the chest, has been coughing, but whose general condition is apparently not alarming. On examining him we were only able to detect at the lower and posterior portion of the right lung an area of dullness ; here the vesicular murmur had disappeared and had been replaced by coarse and moist subcrepitating rales.

These signs deserve to be studied with care, for they may be explained in various manners, and may assume a different semeiological value, according to the case.

What indeed may signify this dullness, this subcrepitant rale and this absence of vesicular murmur ? Such a complexity of signs, as you know, is most frequently characteristic of pneumonia. Are we to conclude that our patient has a pneumonia ? The duration of the disease, the coarse and moist character of the rale, which resembles the *rale de retour*, would lead one to think that it was a pneumonia undergoing resolution ; but such a conclusion is not admissible, as the evolution of his disease in no way resembles a pneumonia.

It is scarcely necessary to consider a pleurisy, for the rales are too superficial, the area of dullness is different, and is not affected by a change of position of the patient.

Congestive pneumonia sometimes presents this totality of symptoms, but the crepitating rales heard in such a condition are quite different from those audible here, for in our case they are very coarse, moist and not modified by the cough; in congestive pneumonia, on the contrary, the rales are very fine, very superficial, and have been compared with the sound produced by rubbing a lock of hair between the thumb and finger. A coarse rale, moist in character and limited to inspiration, is, in reality, the rale of œdema. To tell the truth, œdema of the lungs is not ordinarily accompanied by dullness on percussion; more frequently the resonance is increased, as in ephysema. Therefore, we are justified in saying that we have in this case congestion of the lungs, associated with œdema. On several occasions I have considered with you pulmonary congestion, which we so often meet with as a consequence of the bronchitis of the grippe. Therefore, I shall only discuss with you pulmonary œdema, which is assuredly a rare affection, and the pathogenic conditions of which are still but imperfectly understood.

The œdema may occupy the whole lung, whose volume and weight are consequently greatly increased; the œdematous lung is, in general, but little colored and grayish. It has a flabby feel, yet it will not sink if thrown into water. On section, a rose-colored serum freely exudes, which may be reddish if there has been much congestion. If one examine the lung tissue microscopically one will only find serum in the alveoli. The interalveolar walls are infiltrated and thickened. The connective tissue is also imbibed with the same fluid.

Occasionally the œdema is more limited in extent, and is localized at the lower portion of the lung. This state is noted in patients with heart affections, where the left lung, according to the investigations of Renaut, is in general more frequently involved.

The œdema associated with cardiac diseases differs but little from the preceding. Besides the serous infiltration, there are in a certain number of alveoli small effusions of blood with accumulation of a large number of red blood-corpuscles and alveolar and bronchial endothelial cells. When the lesion is long-lasting, induration sets in, a sclerosis of the interalveolar septa, which are infiltrated with proliferating connective tissue cells. This is the brown sclerosis or brown induration of symptomatic œdema of mitral affections.

This lesion, which is so simple, also presents a very simple symptomology. It is characterized by special rales, coarse, crepitating rales, which are larger and coarser than the subcrepitating rales of pneumonia. Laennec has pointed out that the crepitating rales here are limited to inspiration; indeed, he seemed to attach no less importance to the volume of the rales. Here these differentiations are of little importance; it is only necessary to know if these sounds originate in the bronchioles or in the alveoli, two portions of the lungs which, though they are very closely connected anatomically, from a pathological point of view, may remain isolated. The bubbles of these rales are both of the same size as those of all rales produced in all pulmonary cavities, excepting those of emphysema are the same. In case they originate in the alveoli they are but little modified by efforts at coughing, while the contrary is true of rales in the bronchioles, where mucus may be forced up by the expiration from the alveoli. The shock of coughing, indeed, has no effect upon the vesicular rales. This we have noted in our patient. Therefore, we have a true crepitating rale, but it differs from that of congestion of the lungs, or, better said, pleuro-pulmonary fluxion, where the superficial alveoli are chiefly affected, and where consequently the rales are very fine, very superficial and heard at equal periods. Here, in our case, the rales are very large and very unequally distant one from another. In fibrinous pneumonia, where the alveoli are but little distended by a croupous exudate, the rales are very small and dry. As I before said, the râle of œdema of the lungs resembles in many ways the *rale de retour*, the crepitating one of expiration in pneumonia. Yet there is, nevertheless, a difference; the crepitating rale of œdema is clearer, moister than the latter.

A comparative study of the different rales has therefore led us to conclude that the rale in our case that of pulmonary œdema. In pulmonary apoplexy a variety of crepitant rale is met with which resembles that of pulmonary œdema, but the differential diagnosis is easy, for in this affection they are limited to a small portion of the lung and they are more circumscribed; from the limited area of hemorrhage, the area of dullness is more localized. Besides, blood is seen in the sputa.

In patients with œdema of the lungs the resonance is normal or even increased on percussion, similar to what one finds in emphysema. Most frequently, it is true, there is also a coexisting emphysema. This emphysema is produced in the ordinary manner. On account of the obstacle to respiration the thorax instinctively distends and the patient breathes with the maximum of thoracic distension. This condition may be brought about in animals by injecting air or any gas into the pleural cavity. Now, for example, if one introduce carbonic acid gas, which does not satisfy the desire to breathe, one will notice the appearance of expansion of the lungs. If, on the contrary, oxygen be injected, which satisfies this demand, an atelectasis follows, and finally oppression sets in. When there is pulmonary œdema this oppression exists but the dyspnœa is very variable, according to the form and especially the extent of the œdema.

From the point of view of development, two forms of œdema are best distinguished, a chronic and an acute. The chronic form, the most frequent of which we find an illustration in the œdema of those with heart affections, most often produces no difficulty of respiration. The same does not hold good of the acute, and especially of the subacute varieties, which may be accompanied by grave general symptoms. These patients without any appreciable reason are suddenly seized with extreme dyspnœa, a distressing cough which resembles that of whooping cough is incessant, and after a few mements they commence to expectorate a frothy, albuminous, whitish, and sometimes rose-colored liquid, which is nothing else than the so-called albuminous expectoration often noticed to accompany too frequent thoracocentesis. This form of pulmonary œdema is frequently followed by death. I recall the case of a man who was apparently in good health and who, being seized with a distressing feeling of suffocation, sprang up, opened the window, sat down to cough, choked up and died at once then and there.

These symptoms are especially observed in gouty subjects. Such cases are, it is true, relatively exceptional. Bouveret has recorded them as occurring in the course of typhoid fever; they are noted in Bright's disease. Huchard has met with them in aortitis; I, for my part, have seen them in agina pectoris. Excessive heat or cold is capable of bringing them on. Certain poisons, and especially muscarine, are capable of bringing about constantly subacute œdema. Acute alcoholic poisoning is another relatively frequent cause. The etiology of sub-acute or acute œdema is therefore manifold.

Along with the acute and chronic forms of œdema there is also a variety of sub-acute œdema, which is noticed in arthritic subjects. In these patients one will find at the base of one or both lungs, fine rales which are crepitating in character and very persistent. According to Colin this œdema is especially prone to appear in patients with cholelithiasis or nephro-lithiasis. In a patient, a female, in the Piorry Ward, we have been able to detect for several months the appearance of an œdema at the base of the right lung, coincident with a dislocated kidney, which is seemingly due, in a certain measure, to former attacks of hepatic colic.

What is the nature of pulmonary œdema, and what are the pathogenic conditions under which it may appear? Upon this point our knowledge is still uncertain. Œdema of the extremities results, as we know, from an obstacle to the return of the circulating blood; now we find pulmonary œdema secondary to cardiac lesions, to mitral stenosis for example, which presents a hindrance to the pulmonary circulation. The pulmonary stasis due to hindered circulation in the lung is the principal cause of the œdema. This explanation, though holding good in such cases, will not in all. More is requisite than an obstacle to the circulation of the lung. In animals of different species in which experiments have been made, it has been remarked that in one an obstacle to circulation will produce a pulmonary œdema, while in another nothing of the kind will follow. In the former, it is only necessary to reduce the pulmonary circulation to one-fifth of its extent to determine an œdema. As one does not find in all subjects affected with the œdema an obstacle to circulation, it has been thought that the disturbance might be dependent upon a disturbance of the propelling force of the heart; this is, however, a too inconstant condition. It has also been held that the left ventricle, no longer competent, formed an obstacle to circulation. Finally, it has been supposed, and above all, in sudden œdema, that sudden modifications in the blood supply of the lungs might cause œdema. Now one may observe considerable hyperæmia of the lungs without œdema, and, reciprocally, œdema without hyperæmia. A fourth factor has been brought in, the state of the pulmonary capillaries; these latter, under certain conditions might oppose a diffusion of the liquid in the lungs. The state of nutrition of the vessels, it must be admitted, is of importance, for, after death, œdema easily occurs. Hence, the causes are manifold which may influence the capillary circulation. Without mentioning heart diseases, with their associated difficulty of respiration, in consequence of their modifications of the blood, even nervous influences may act in various manners upon the pulmonary circulation. It is difficult, as is easily seen, to form an exact judgment of the real cause of the œdema. The local influence and the peripheral resistance are certainly of consequence. This is all that can be said at present, at least. The prognosis of œdema is essentially variable ; grave in acute œdema, is less gloomy in the chronic variety, except where from a special cause, it tends to become progressively aggravated, therefore it is necessary in the prognosis to keep in mind the determining cause. In our patient the conditions under which the œdema has appeared, associated with the œdematous congestion, exclude all idea of gravity. At no time since he has entered our service have we been obliged to be anxious with regard to him. Thus the œdema has been treated expectantly, and the initial pulmonary congestion of grippal origin has been treated. It would by no means be the case if the œdema were extensive or menacing. The indications would be numerous. It would be necessary to employ derivatives, under the form of dry or bloody cupping or venæsection. If the œdema appears rapidly a mustard plaster may be applied to the chest, the arms and legs be placed into hot water. If the œdema be prolonged, purgatives are of service. In chronic œdema this symptom is but an accessory part of the disease. Therefore, no special medication is called for ; treatment should be directed towards the causual disease.

You will observe that it is necessary to recognize the existence of pulmonary œdema. In certain cases it is capable of forming a decided hindrance to a diagnosis. In others an immediate diagnosis and urgent treatment are called for.

The learned lecturer has wisely divided pulmonary œdema of the lungs into acute and chronic. In the acute and sub-acute varieties the most striking symptom is the great and distressing dyspnœa, and the patient is in a condition that demands immediate help. It may arise from pulmonary congestion, as from a neglected cold, that follows sudden injuries of the brain or irritation of the pneumogastric. There is also a form which may come on after a violent exertion, as from dancing after a full meal, preferably in a subject with mitral insufficiency or from running rapidly upstairs after a full meal. In chronic nephritis acute œdema of the lungs may come on suddenly and rapidly prove fatal. (Osler, " the Principles and Practice of Medicine," New York, 1892, p. 506). Da Costa ("Clinical Diagnosis ") also points out the similarity of this disease with acute pneumonia. The dyspnœa, the crepitant rale may well mislead ; but we cannot err, he states, if the frothy sputum, the general distribution of the rales, their somewhat coarser character, the bluish lip, the noisy breathing and the absence of fever be taken into account. In acute œdema these are the precursors of death. In chronic œdema the rales are persistent, and so is the difficulty of breathing. The patient has usually to be propped up with pillows or he cannot breath at all.

Pulmonary apoplexy, as Potain states, is another affection accompanied by great difficulty in breathing. But the lesion, the infarct, is small and circumscribed. There is also associated external hemorrhage. On examination, a grave disease of the heart is found, which will explain why extravasation of blood into the pulmonary structure has taken place. The branch of the pulmonary artery supplying the infarcted part is most frequently plugged by an embolus, which has been whipped off and swept into the lung, most commonly the right one. Again, there is more pain with pulmonary apoplexy than in pneumonia, while in œdema the pain is utterly lacking. The dyspnœa is also sudden and greatest at first, when the blood is extravasated, and declines from then.

Laennec ("Treatise on the Diseases of the Chest," etc., English translation by J. Forbes, New York, 1893, p. 178), who was the first to describe pulmonary œdemna, presented the signs by which it is now recognized. In cases it complicates ephysema. Woillez (" Dictionaire de Diagnostic Medical," Paris, 1870, p. 696) states that the ausculatory and percussory signs may be very obscure or nearly absent. Prof. Nil Filatoff (" Semiotik und Diagnostik der Kinderkrankheiten," Stuttgart, 1892, p. 218) in children has found œdema of the lungs to be a forerunner of death in various acute diseases, and to be due to cardaic weakness. It may be distinguished from capillary bronchitis by the rapid appearance and extension of the rale, and especially by the sputum, which Laennec has compared with a mixture of equal parts of egg albumen and water, and which is profuse, frothy and fluid.

Among the other lung diseases in children, which he mentions as without dullness on percussion, but with cough and dyspnœa, are pulmonary œdema and emphysema (p. 203). Pulmonary œdema he grants greatly resembles, at least in children, from its physical phenomena, an extensive bronchitis, as it is characterized by dyspnœa, with a resonant sound on percussion, with numerous moist and fine and coarse rales in both lungs. A diagnosis of the œdema may frequently be made by associated conditions, for example, of general anasarca from nephritis, or heart incompetency, heart weakness in grave infectious diseases, difficult hindrances in the pulmonary circulation from copious pleuritic exudates, in pneumonia, etc. Again, the sudden developments of orthopnœa, with simultaneous cyanosis and coldness of the extremities, are characteristic of œdema. A capillary bronchitis never extends so rapidly over both lungs, but commencing at the posterior-inferior portions gradually increases in extent.

Emphysema is not the disease of adults, but rather a dilatation of the lungs, a temporary affection of children, and distinguishes itself by extension of the area of pulmonary resonance, pushing down of the liver, diminution of the cardiac area of dullness. It may be associated with whooping cough or chronic bronchitis.

In the treatment of œdema of the lungs modern means has yielded brilliant results that are beyond comparison with those obtained by older means. It is especially in the acute and sub-acute forms, where no chronic organic lesion is at the bottom of the trouble, that such striking proofs of the superiority of our measures are remarked. Even in the other conditions where it has appeared the results are good, but if a serious organic incompetency be the cause they cannot be lasting.

The remedies recommended by various writers are: Aconitum, arsenicum, ammonia carb., carbo veg., ipecac, kali iod., kali phosph., phosphorus and tartarus emeticus.

Aconitum.—In the so-called inflammatory œdema (Osler, l. c.), such as that associated with ordinary congestion of the lungs or that associated with pulmonary inflammatory states, when indicated, aconitum must be the remedy. Its ability to control, as well as to produce these grave congestive states, is shown by the poisonings and provings and confirmed by therapeutics. Hering (cited by Burt, "Physiological Materia Medica" Chicago, 1883, p. 49,) presents the following clinical picture as characteristic: "Asthma from active hyperæmia of the lungs and brain; face red, eyes staring; feeling of a band around the chest; muscles of the chest rigid; agony, sits up in bed, can hardly breathe; pulse like a thread; vomiturition; urine scant and dark; sweat, with anxiety; after the paroxysm has white, yellow or blood-streaked sputa."

Dr. Lambreghts ("Journal Belge D'Homœopathie" No. 3, vol. ii, 1895) reports the interesting case of a man of thirty-five years, very corpulent and of a sanguine temperament, who had taken cold and in spite of an incessant cough he had persisted at his work, until he had suddenly become worse. When seen, he was sitting up in bed and gasping for breath, scarcely able to answer except in monosyllables, while his respiration was painful and accelerated. Frequent attacks of irritating cough brought up a frothy liquid, mixed with clear red blood. His pulse was small and rapid and the heart beats weak. His face was covered with a profuse cold sweat, and he was anxious and excited. No dullness on percussion, but on auscultation fine and subcrepitating rales were to be heard throughout both lungs; temperature normal. Diagnosis: Acute pulmonary congestion with œdema of both lungs. An unfavorable prognosis was given, as he might die at any minute. Aconite and phosphorus were given, in alternation. The next day he was better and in three days he was able to go to work again. Though the scientific accuracy of this report is marred by the alternation of the phosphorus, aconite was undoubtedly the remedy which brought about the favorable result.

Arsenicum.—Lilienthal ("Therapeutics," second edition, p. 549) gives as indications of this remedy: "Great anxiety, restlessness, always worse towards midnight or soon after; must incline the head forward to breathe; loss of breath immediately on lying down, expectorates frothy saliva." Though arsenicum will undoubtedly act wherever indicated, its therapeutic sphere would seem to be in œdema secondary to anasarca, from an affection of the kidneys, lungs or heart. Ch. Gatchell ("The Key Notes of Medical Practice," Chicago, 1887, p. 36), calls attention to the debility and prostration as characteristic, and especially if the disease associate itself with anasarca. Though rather indicated by its pathogenic action in nervous asthma it might occasionally be of service in œdema.

Ammonium Carbonicum.—Gatchell says to give this remedy on the first signs of drowsiness and carbonic acid poisoning. Lilienthal gives as characteristic: "Somnolence, poisoning of blood by carbon; difficult breathing, causing short cough, relief from fresh air, and when sitting quiet." Hering speaks of a thin, foamy sputa, rattling of large bubbles in the chest under the remedy.

Carbo Vegetabilis.—Lilienthal states carbo veg. to be of service in a collapsed state; hoarse mucous rales in the chest; rattling of large bubbles, face pale, skin cold; slow, intermittent pulse; wants to be fanned. From the general trend of opinion among writers this would appear to be of value in œdema of the lungs, occurring as a complication in emphysema, especially in the aged.

Ipecacuanha.—Spasmodic cough, sickness of stomach; fine rattling noises in the chest; dyspnœa, with threatening suffocation; the chest seems loaded with mucus and still there is but little expectoration; face rather pale (Lilienthal, l. c.)

Though we usually think of ipecac in dyspnœa of a catarrhal nature, I know of one case of true œdema of the lungs which came on in a man of forty-eight years with extreme suddenness, and in a short time nearly cost him his life, where ipecac (with aconite), actually brought him back from the brink of the grave. The loud rattling in the chest, with paleness, cold sweat and cyanosis, were the indications pointing to the drug. Dyce Duckworth (cited by Burt, l. c.) noted, post mortem, in experiments on animals, an intense hyperæmia of the lungs, which were in places collapsed. Hughes ("Parmacodynamics") states that ipecac sets up an irritation of the mucous membrane, increased secretion going on to catarrhal inflammation. In other words, ipecac is capable of producing a sputa that is not necessarily mucous but watery.

Kali Hydriocum.—Œdema pulmonum, with sputa like green soap suds. Burt (l. c.) also cites it in œdema of the lungs where the oppression awakens the patient in the morning hours. The action of the iodide upon the mucous lining of the bronchial tubes is well marked, as shown by the hoarseness, oppression of breathing, short and hacking cough, finally accompanied by copious green expectoration. Kobert ("Lehrbuch der Intoxikationen," p. 374,) also calls attention to dyspnœa, cough of an irritating nature, the iodic asthma, etc., as produced by iodine.

Bonino ("Primi Studi di Materia Medica," Turin, 1893, p. 197,) directs attention to the value of iodide in a tendency to broncho-pulmonary congestions, where the respiration difficult and short; especially inspiration is difficult, with pains of a piercing nature in the chest. Great dyspnœa, as if the chest could not be distended. Though œdema of the lungs has not been noted in poisonings, yet œdema of the glottis has been observed after the iodide has been taken.

Kali Phosphoricum.—Lilienthal recommends it in acute œdema, with dyspnœa, spasmodic cough, with expectoration of frothy serous masses, lassitude and prostration.

Phosphorus.—Dyspnœa worse before midnight, with tightness of chest; noisy, panting breathing; chest feels full and heavy, with tension; expectorates cold mucus, tasting sour, salt or sweet.—(Lilienthal).

Gatchell (l. c.) advises the drug in acute pulmonary œdema in connection with pneumonia, or other diseases of the respiratory organs. He cites Kafka to the effect that the remedy here sometimes has a brilliant action. Baehr claims it to be possessed of extraordinary powers against pulmonary œdema. Dr. Puhlmann ("Handbuch der Homœopathischen Praxis," Leipzig, 1894, p. 187,) also speaks highly of it.

Tartarus Emeticus.—Cyanosis, audible breathng, rattling, great dyspnœa, course rales, the bronchial tubes containing a great quantity of mucus, the patient in constant danger of suffocation. Œdema of the lungs occuring in the course of general dropsy, (Gatchell). He cites Hughes, who says that he more than once has seen the œdema subside entirely under the use of this medicine. This drug has an undoubted action upon the lungs. Burt quotes Wood to state that the effect of the drug appears to be upon the respiratory center, to cause a venous intense pulmonary congestion from failure of circulation and alteration of the blood itself. Burt presents as characteristic indications: "Cough when we have partial paralysis of the vagi; short, hoarse, weak, nearly suffocating breathing, with whistling noise; thorax expands with great difficulty; head thrown backward, with great anxiety and prostration, face livid and cold; forehead and sometimes the whole body covered with perspiration; pulse feeble and accelerated. Though we naturally regard the characteristic sputa as mucus, it might be indicated in a thin and watery expectoration. Puhlmann (l. c.) regards it and phosphorus as *the* remedies in this state. Peculiarly enough the remedy which produces a pulmonary œdema *par excellence*, muscarine,has not been employed. Kobert (l. c.) mentions it. Post mortem the pulmonary œdema is found as a characteristic sign. The poison has the peculiarity of arresting the heart, from stimulation of the inhibitory nerves; profuse sweating, dyspnœa, a pallid and cyanotic appearance of the face, delirium, prostration with diarrhœa and vomiting, have been noted. From subcutaneous injection of 1-3 mgms., Kobert (l. c.) states the following symptoms to have been observed: profuse salivation, rush of blood to the head, increase of the frequence of the pulse without consequent slowing, reddening of the face, vertigo, anxiety, sensation of suffocation, nausea, colic, disturbances of vision, profuse sweating, especially in the face and to a less degree over the body. Convulsions have also been noted.

Man is the only animal who drinks when he ain't dry.

CHOICE OF METHOD AND INDICATIONS FOR RADICAL OPERATION IN PUERPERAL SEPSIS. (ABSTRACT.)*

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IN a paper read before a recent meeting of the Louisville Clinical Society, the author said he would not discuss the minor procedures, but confine his remarks to radical operations, by which he meant opening the peritoneal cavity, either for the purpose of irrigating or breaking up adhesions or for hysterectomy and operations through the vagina, either for the purpose of drainage or removal of the uterus.

When shall we resort to these severe operative measures? There is a time when they become clearly indicated. There is also a time, early in the history of many of these cases, when radical operations should be done, and in this class a decision is extremely difficult. Ask yourself the question, when shall the abdomen be opened in puerperal sepsis? When shall an hysterectomy be performed for a puerperal infected uterus? I know of no operation which the surgeon should consider so carefully as the removal of the uterus following childbirth. There is a time when it must be done, and when the indication is very clear. When this becomes so, our patient is usually in an extremely septic state; the infection has reached its maximum; vitality is very low, and the chances of a successful operation are correspondingly diminished. It is a grave matter to remove the uterus before we are absolutely assured of its necessity; still, beyond question, it sometimes becomes necessary, and should be done early. There may not be tubal disease, the infection may be confined alone to the uterus. Infection often extends into the uterine muscularis through the lymphatics; there may be foci of pus in the walls of the uterus itself or sub-peritoneally; there may be a large area undergoing septic degeneration which has begun in the lining membrane of the uterus, which it is impossible to remove by any minor operation. Such a case I have recently seen. After a thorough curetting there was no amelioration of the symptoms, and while there was no demonstrated lesion in the broad ligaments or the tubes after the uterus was removed, there was a large infected area where the tissue was extremely soft—clearly the result of a septic infection at the site of the placenta, which, with the fœtus, had been expelled as the result of an abortion.

We find that these uteri, which should be removed, undergo involution very slowly; they remain large, tender to the touch, usually soft, having a boggy feel upon bi-manual examina-

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tion; the patient's temperature continues above the normal; there are rigors or chilly sensations; distension of the abdomen or slight tympanites—all the symptoms of a sepsis, which we know from the local manifestations, arises from the uterus. It is assumed that we have already resorted to our minor procedures—irrigation, peroxide of hydrogen and other antiseptics locally, etc., still the woman grows progressively worse. If radical measures are not carried out in this stage, the disease will soon extend beyond the uterus, infecting the peritoneal cavity, but by early operation the woman has a good chance of recovery.

In such a case I should consider the indication one for a radical operation. There are also others. We have palpable lesions of the tubes and ovaries, following rapidly upon childbirth—an acute pyosalpinx, if you choose, the result of puerperal infection. Tubal trouble may arise very rapidly after childbirth, and so in like manner may pelvic abscesses. Both of these clearly indicate surgical interference.

As to the manner of operating: The dexterity of the surgeon and his operative ability necessarily play a part. There is a certain class of these cases which unquestionably are better treated by the sub-pubic method; others are best treated by the abdominal method. Each operation has its indications. We should weigh the condition carefully, and then determine which plan of procedure is the better. There is no question in my mind that the abdominal incision is preferable in a certain class of these cases. In dealing with abscesses in the broad ligament, which do not extend out of the pelvis, the better plan is to incise them through the vagina, breaking up all loculi, opening every abscess, irrigating thoroughly, and draining. If there is merely an induration at one or both sides of the uterus, if the formation of pus has not been absolutely demonstrated, though we may believe it to be present, the vaginal method is by far superior; for if no pus is found, the simple fact of an incision with drainage by gauze will cause a rapid improvement.

Conservative surgery may do much in these cases, and the vaginal operation done early is conservative surgery. I believe that many pus tubes could be prevented; that much damage by long-continued inflammatory processes in the pelvis, following childbirth, could be avoided, if the vaginal operation was early carried out and gauze drainage resorted to. The operation of vaginal incision is also in a certain measure an exploratory operation. Very often it is almost, if not quite, impossible to say that we have a pyosalpinx. If we have opened the abdomen and find no pus, if we find no disease of the tube, we have endangered our patient to no good. The tubes may seem somewhat inflamed and thickened, but we cannot positively demonstrate even then that they contain pus, and to remove them would destroy the child-bearing function of the woman. On the other hand, if an incision has been made through the vaginal wall, and the ovaries and tubes palpated, they may be left or may be incised, should it be thought they contain pus, but they need not be removed. Abscesses of the broad ligament, or peri-uterine abscesses we can much more easily approach through the vagina. There is no danger of soiling the peritoneum, and the danger of operative infection is markedly lessened. We do not open the peritoneal cavity at all, but freely incise and drain as we would abscesses elsewhere in the body. If the pus sacs extend high up in the abdomen it is then better to approach them by means of the abdominal incision, and even if we find only one abscess cavity it can be drained through the incision without danger of peritoneal infection, or we can make a counter-opening in the most dependent portion and drain through the vagina. In this latter class of cases, the advantage of the high operation is that often there may be pus sacs within the peritoneal cavity itself, formed by adhesions between the coils of intestines, confining the pus, as it were, in the peritoneal sac. These abscess sacs cannot possibly be broken up except from above.

In case of a septic uterus I believe that the vaginal hysterectomy is to be preferred, because it is not necessary to leave a pedicle, it is not necessary to drag septic tissue through the peritoneal cavity; we have a natural method of drainage, and the operation is just as easily and, if anything, more quickly done.

I would advise the use of clamps. In a gangrenous uterus, however, the result of puerperal infection, it is questionable whether we should operate from below with clamps. The surrounding tissues are usually so rotten that it is impossible to make the clamp hold. These cases may usually be recognized by the extreme friability of the cervical tissue. Intestinal adhesions and portions of infected tubes or infected tissue are frequently left behind after vaginal hysterectomy, but the results are nevertheless better than by the abdominal method. The operation in many instances is very tedious, and the work may to a large extent be done practically in the dark; still, when we consider the greater chance of infection by removing the uterus from above, doing a total enucleation, and the dangers and prolonged convalescence which follow a partial hysterectomy, either treating the stump extra-peritoneally or intra-peritoneally, there can be no question as to which method is preferable.

One other indication I failed to mention, *i. e.*, purulent puerperal peritonitis. In purulent peritonitis, the result of puerperal infection, the abdomen should be opened from above. While, as a rule, these cases are fatal, they should be given the chance. Thorough irrigation, breaking up all adhesions, drainage through the abdomen, and also through the vagina, as indicated, should be the rule.

In those cases where the lesion is palpable, where, by bi-manual examination, evidences of gross pathological change can be demonstrated, it is easy to decide what to do. I recently reported a case in which I was almost sure an hysterectomy would be necessary, but operation was deferred, and the patient made a complete recovery. We should give our patients every possible chance, keeping them under close observation, and so long as there is any improvement whatsoever, or they do not lose ground, unless there is absolute evidence of disease of the adnexæ, or of the surrounding structures which cannot be removed otherwise than by surgical means, I should delay operation in the hope that it might be entirely avoided, as it was in the case mentioned. Many of these patients do not completely recover, but if the condition left after the infection has run its course is not such as to endanger the woman's life or destroy her usefulness to society, I believe she should not be operated upon. Some do recover permanently, and even if they do not, in many cases, operation may be deferred for some time, thus giving them a far better chance of recovery.

REMARKS.

Dr. W. H. Wathen: The important question in connection with the subject of surgical treatment of puerperal sepsis is the preventive means. At Baltimore last year, Dr. Henrotin and I called attention to this fact in papers read before the American Gynæcological Society. Where the septic infection has caused exudations in one or both broad ligaments, or where septic matter has been carried through the lymphatics to the peritoneal covering of the uterus, invading the peritoneal structures of the pelvis, before pus has formed, we may, after opening the vaginal wall behind the uterus, and exposing infected areas, by irrigation and drainage with idoform gauze, prevent the formation of pus or further extension of the septic infection. Just how far we will succeed in this preventive treatment future experience must prove. Of course you all know that I advocate the vaginal method of treatment where infection is confined to the uterus or to the pelvic structures. I should never consent to an abdominal operation where there is bilateral disease of the adnexæ, for the reason that in these cases the uterus should always be removed, because if left it is a useless organ and may cause not only immediate but subsequent trouble ; it may be more easily removed and with less danger through the vagina, and the woman will recover more speedily and with fewer subsequent complications.

In regard to operation for diffuse suppurative septic peritonitis : I do not think it justifiable, because there is no record of a case that has recovered. We are not always able to diagnose diffuse suppurative pelvic peritonitis, and I have several times thought I was treating such cases, but the patients recovered without any operation. I wish to emphasize that there is hardly a case of puerperal sepsis where I would operate from above. I do not care if pelvic abcesses extend up to the umbilicus; in these instances you can drain them more successfully from below, and more easily prevent infection of the peritoneum, and can remove the tubes and ovaries when necessary. You can remove them in these cases as readily by the low operation as you can from above, because if the abscess extends up to or in the region of the umbilicus, it is no longer a tubal or tubo-ovarian abcess, but is an abscess that has become encysted in the peritoneum, caused by leakage of pus and infection of the pelvic peritoneum, which has been shut off by a layer of intestines, above matted together, and which ought not to be separated if it is possible to relieve the patient without doing so. By the low operation you do not separate these adhesions; you drain the case perfectly, the woman recovers and has no further trouble from the pelvic adhesions, because these layers of intestines do not interfere with the passage of gas or fæces. If you operate from above you separate these adhesions, and if the pus is virulent you probably kill your patient; or if death does not result, the intestines again become adherent and you have a condition following the operation far worse than before the adhesions were separated. Any one who has had much experience in laparotomy work knows how frequently we find cases where the intestines are matted together in a mass of adhesions, sometimes involving the entire bowel.

Dr. J. G. Sherrill: I have recently had two cases of septic infection from abortion and labor. In one of them a double operation was performed for removal of the uterine appendages. There was great difficulty in getting a ligature to hold at the uterine end of the tubes, on account of the exceedingly friable nature of the structures. In this case I believe the uterus should have been removed.

The most important question, it seems to me, is not whether we shall adopt the abdominal or the vaginal method, but whether or not we shall remove the uterus in these cases. The question is positively decided, of course, where the uterus is plainly septic. In such cases the uterus should be removed along with the appendages; if you take out the appendages and leave the uterus, also the stumps of the Fallopian tubes, it is likely to presume that the uterus will remain septic and the woman will have further trouble. Besides this, as has been stated by a previous speaker, after removal of both appendages the uterus is a useless organ.

I agree with Dr. Wathen in the statement that removal by the vaginal method in these septic conditions is undoubtedly preferable to the abdominal operation. I have thought also that a combined method might be indicated in these cases ; it would facilitate a more speedy removal of the diseased structures. What I mean by a combined operation is an incision from above, opening the abdominal cavity, which allows a free separation of the uterus from the bladder, etc.; also opening the vagina, and then clamp forceps may be applied to the broad ligaments by means of visual inspection from above. In removing the structures from below, aided by an incision through the abdominal walls, allowing free inspection, we may be certain that all diseased tissues are removed. I think this would give the best method for drainage, and be the most rapid and effectual means of operating. I take it that Dr. Frank has rather overestimated the advantage of simple incision of the vaginal wall, packing and drainage. If there are diseased structures in the pelvis, I fail to see how relief can be obtained by simply making an opening through the vagina; I cannot see how opening the pelvic cavity through the vagina would relieve inflammation or a septic condition of either the tubes or ovaries. If such a condition exists, it would very likely be necessary to remove the septic structures. However, when you open the posterior vaginal wall you can readily palpate either the tubes or ovaries, and in this way determine the amount of disease present, and also decide what further operative measures are indicated. Recently I had occasion to open an old abscess through the vagina, the woman two years previously having had an attack of tubal trouble, an abscess rupturing into the rectum. I deemed it better to operate per vaginam, because the woman had already suffered from long-standing inflammatory processes about the pelvis, and adhesions resulting therefrom would necessarily prolong the operation if the abdominal method were employed. This patient is at present in better health than she has been for several years. If the curette and thorough irrigation do not reduce fever, and the symptoms of sepsis continue, then I believe that an immediate removal of both the uterus and appendages should be done through the vagina. Henrotin urges as one of his claims for this operation that the woman does not appreciate the enormity of the procedure, and is not therefore depressed, and that wounds made through the vagina heal more readily on this account, because the woman does not suffer from the depression that naturally results from so large an operation. Moreover, he claims that the vaginal method is preferable, because no visible scar is left and the patient does not realize the real extent of the operation.

Dr. A. M. Cartledge: The question of operative measures for puerperal sepsis is one that is agitating the minds of thinking abdominal and pelvic surgeons all over the country. It has only been sixteen months since the entire number of hysterectomies in the class of cases Dr. Frank describes that had been performed, was nineteen, that is, only nineteen cases had been reported up to that time. I suppose within the last twelve months the operated cases will number a hundred. I think that Dr. Frank has reference to a little different class of cases from those spoken of by the gentlemen who have discussed his paper. In the class of cases evidently referred to in the paper it becomes one of the most difficult problems to determine the positive indications and time for operative interference. We have all seen parturient women suffer from puerperal sepsis, the so-called puerperal fever. The labor in all respects may have been normal, but in a few days the woman develops abdominal swelling, tenderness, temperature probably reaching 103° Fahr. in the evening; we prescribe saline purgatives, employ antiseptic irrigations, and the woman gets well. In such cases many physicians with large experience would think that we were advocating too radical measures if we suggested hysterectomy, when they have seen numbers of cases recover under such a plan of treatment. These cases are puerperal sepsis in a mild form, some perhaps starting out in a violent way, but finally getting well. The class of cases that Dr. Frank refers to in his paper are those which last a week, two weeks, four and even fifteen weeks. When should we step in and by a hysterectomy remove the septic tissues? It is a very difficult question to decide.

To begin with, I think we should very carefully study the pathology of these cases; I am quite sure until recently we have been wrong. Most abdominal surgeons have been erroneous in their ideas as to the causation of puerperal sepsis. We dwelt to such an extent upon inflammation of the tubes, salpingitis, pyosalpinx, etc., from puerperal sepsis and gonorrhœa, that our attention became fixed upon this part of the anatomy, and we were looking after large pus tubes from every form of infection. As a matter of fact, puerperal fever, as seen by physicians, cases which develop on the third, fourth or fifth day a high pulse, delirium, swelling of the abdomen, the clinical picture which goes with puerperal fever, many cases coming on as late as seven days after delivery, is a sepsis confined to the uterus. And it is my positive opinion from some experience in these cases that infection is primarily in the cervical region, and that it almost always begins in a cervical tear at this point, spreading thence by continuity of structure to the uterine tissue itself. Infection, beginning as it does low down in the cervix, may extend to the deeper portions through the lymphatics, or to the glands just upon either side of the cervix proper in the lower pelvic space, giving rise to septic adenitis or periadenitis, the so-called pelvic cellulitis. I believe in cases such as Dr. Frank describes, that in fully 90 per cent. the pathological lesion will be one of low pelvic abscess, constituting a septic cervicitis or septic metritis. This is very important, bearing upon what course we shall adopt if operative treatment is necessary. We should carefully study the early history of these cases, especially as regards the mode of infection. We may have a septic metritis, and this is the pathology of nearly every case of puerperal fever; or a septic endometritis, or a septic cervicitis. Now when shall we step in and operate, removing this septic uterus; what shall be the method of selection, and what proportion of cases will recover?

Dr. Frank did not dwell quite long enough upon the usual methods of treatment—I refer to curettage, uterine drainage, etc. There is no doubt in my mind that nearly all the women that are lost from puerperal fever—puerperal sepsis—are the result of physicians, surgeons and specialists failing to recognize the importance of early preventive treatment according to the measures already indicated. We should see that proper drainage and irrigation are instituted, instead of giving directions to the nurse to use a douche; by this means I believe we could save a great many cases as a result of direct extension from the original cervical infection. Instead of ordering a douche the woman should be put upon the table and the uterine cavity thoroughly irrigated with an antiseptic solution, then a tubular drain should be carried into the uterus, not relying upon gauze. We should use for this purpose a firm rubber drainage tube as large as the index finger, with thick walls to insure against collapse of its walls. The cervix will contract and compress gauze so that it is impossible to secure drainage in this way. In irrigating the uterine cavity we should use two to five gallons of water, adding peroxide of hydrogen or other antiseptic agents. If an abscess be found about the cervix it should be opened freely and packed with gauze. After following out this line of treatment faithfully for a few days, if the temperature continues high, the chances are septic infection has spread through the lymphatics to the deep uterine tissue and peritoneum, and more radical measures are indicated. I have some specimens removed from two cases of puerperal sepsis operated upon, being large sub-peritoneal uterine abscesses, which look very much like fibroid tumors. In both cases preventive treatment was faithfully carried out, but this failed to arrest the progress of the disease. Hysterectomy was finally resorted to, resulting in one death and one recovery. In the first case I operated in the twelfth week of the disease; patient a primipara, forceps delivery.

She was in profound sepsis at the time of the operation, and died eighteen days later, the blood having become so charged with septic products that pyæmic metastatic abscesses developed all over the body. In the second case operation was performed in the fifth week, and the patient recovered. One operation was done by the combined abdominal and vaginal route, and the other by abdominal hysterectomy; but with my experience in these cases I am inclined to agree with Dr. Frank that the vaginal method is preferable in the vast majority of cases, especially where there is not extensive involvement of the tubes and ovaries.

Dr. Louis Frank (closing): While thanking the gentlemen for their kind discussion, I must say that Dr. Cartledge is the only one who has adhered to the text.

In reply to the other two gentlemen I will say that you know my position in regard to preventive treatment, for I am sure that practically all cases of puerperal sepsis are preventable. Further, you all know I am an advocate of early currettage and drainage of the uterus itself. In my paper before the State Society my views were fully expressed. The cases under discussion are not of this class, but are those in which all minor procedures have failed, and where, unless something is done, death is inevitable. As my friend Dr. Cartledge says, these cases are not early ones, but as a rule infection has existed for some time. Weeks, or even months, may have elapsed since the initial infection, the patient never, however, recovering, growing worse, until eventually radical procedure must be resorted to.

On the fence of a Western ranch is pasted the following: "If any man's or woman's cow or horse breaks through this fence and destroys the grain, his or her tail will be cut off, as the case may be. I'm a Christian man, but d—n any one that lets their critters run loose o' nights."

METROPOLITAN HOSPITAL, BLACKWELL'S ISLAND; GENITO-URINARY WARD.

DR. BUKK G. CARLETON, VISITING SURGEON.

Reported by Baylis H. Earle, M. D., House Surgeon.

C. D. G., admitted May 27, 1896; age, fifty-seven; England, single, butcher. Diagnosis: Simple annular strictures of anterior urethra, inodular strictures of deep urethra and cystitis.

Heredity, negative; habits, intemperate; had gone to excess in sexual indulgence since early youth.

Previous history: Had first attack of gonorrhœa at sixteen years of age, and had repeated attacks after until thirty-fifth year. No treatment. Had not had acute gonorrhœa since thirty-fifth year, although frequently exposed to it, but had experienced great difficulty and much pain in urination, especially after catching cold or drinking heavily. On later occasions had to use considerable force to pass even a small stream.

Present history: Had been drinking and contracted a cold just previous to admission, and in consequence experiences great difficulty and pain on micturition. Has a gleety discharge and increased frequency of urination, and at times retention with involuntary dribbling. Has hemorrhoids as a result of the constant straining. Is nervous, peevish and irritable, and is much emaciated. Suffers from anorexia, indigestion and constipation. Heart and lungs appear normal. Urinalysis: Specific gravity, 1,016; color, amber; reaction, neutral; chemical examination, negative; microscopical examination shows pus, triple phosphates and bladder epithelium. On examination with bougies, urethra is found to be almost impermeable down to triangular ligament, because of numerous successive annular strictures of small calibre extending from meatus to this point, and impermeable beyond this point, because of inodular strictures of membranous portion.

Treatment: Given boric acid, grains v., t. i. d., for its antiseptic effects on the urine, and nux vomica, ix, tablet morning and evening, for the general condition.

May 29th: Given Rochelle salts, ʒ i, at 5:00 A.M. In afternoon, patient prepared for operation by shaving pubes and surrounding parts, scrubbing with green soap, and washing off with bichloride solution (1-3000). Limbs and abdomen were then covered with towels wrung out in bichloride solution (1-3000) and urethra thoroughly syringed with a saturated solution of boracic acid, after which it was injected with ʒ i of a sterilized 4 per cent. solution of cocaine, etc., the meatus held closed for five minutes. At the same time patient was given spirits frumenti, ʒ ss, to guard against the nervous phenomena which sometimes follows the use of cocaine. The meatus was then enlarged by means of a blunt-pointed bistoury to size 28 French, after which sheath of Maisonneuve urethrotome was introduced down to triangular ligament and medium sized blade passed in on its full length and withdrawn, cutting urethra to size 25 French. There was little hemorrhage and patient suffered no pain. The meatus was then sealed with flexible collodion to prevent further hemorrhage and patient carried to his bed.

June 1st: Patient has remained in bed since operation, and has passed a larger stream than formerly and less frequently, and with but slight increase of pain. Sounds, sizes 18 to 20 French, passed as far as triangular ligament, the first causing some pain, but not even a filiform can be passed beyond this.

June 17th: Patient has remained in bed and same remedies have been continued. Sounds have been passed every third day as far as triangular ligament, increasing a size each time, and he now takes 25 French without difficulty, but the deep urethra is still impermeable.

June 18th: Given magnes. sulph., ʒi, at 5 A. M., and an ounce in the forenoon. Perineum and surrounding parts then shaved, thoroughly scrubbed with green soap, washed with bichloride solution (1-3000), and bandaged with sterilized dressings wrung out in same. In the afternoon, his heart, lungs and kidneys being normal, patient was placed under the influence of ether. He was then placed in the lithalomy position by means of a Clover's crutch and the perineum again thoroughly scrubbed with green soap and then washed off with carbolic solution (1-200), bichloride solution (1-3000), pure alcohol and again with bichloride solution (1-3000). Patient's limbs and abdomen were then covered with sterilized towels wrung out in bichloride solution (1-3000), leaving only the penis, scrotum and perineum bare. Wheelhouse's modification of perineal section was then performed by Dr. Bukk G. Carleton as follows: Wheelhouse's staff was introduced down to the triangular ligament, its grooved surface being against the floor of the urethra, and held by an assistant, so as to make the perineum tense. An incision, an inch and a half in lenth, was then made through skin and superficial fascia exactly in median line of perineum and down to within half an inch of the anus. The surgeon then felt for the groove of the staff and cut into it, thus opening the urethra in front of the stricture. The sides of the canal (the mucous surface of which is easily recognized) were now held apart with forceps and the part still further exposed by turning out the blunt hook of the staff through the wound, thus drawing the urethra forwards. After some difficulty Arnott's grooved director was introduced through the stricture, the mouth of which was brought into view. The difficulty experienced was due to the very tortuous course of the membraneous portion of the urethra, caused by inodular strictures, but under the skillful and experienced hands of Dr. Carleton it was soon overcome. Gourley's beaked bistoury was next passed in on the director and the strictures cut on the roof of the canal. Teale's gorgette was then introduced on the director and in turn a rubber catheter, full size, on it. The bladder was thoroughly irrigated through this by means of an Ultzmanus hand syringe, with Thiersch's solution, until it returned pure, the urine drawn off at first being thick, cloudy, very offensive, and filled with shreds of whitish matter. There was little hemorrhage, three small arteries needing to be tied. The catheter was left in and the wound washed out with bichloride solution (1-4000) and packed around the catheter with sterilized iodoform gauze, wrung out in the same. An antiseptic dressing was then placed over all, and held in place by a T-bandage, the catheter depending through an opening in the latter, and being secured by a safety-pin passing through it and the dressings. The patient was then returned to his bed and the catheter connected by means of a short glass tube with several feet of rubber tubing, the end of which was immersed in several ounces of carbolic acid solution (1-20) in the bottom of a large bottle placed beneath the bed. By this arrangement the urine may be continually siphoned from the bladder. The whole operation took about half an hour, and the patient reacted quickly and well from the ether. The operation was done under the strictest antiseptic precautions, the doctors and assistants wearing sterilized gowns, and having their nails, fingers, hands and arms thoroughly cleansed by scrubbing with green soap and washing in bichloride solution (1-4000), and the instruments and dressings being sterilized and the former placed in hot carbolic solution (1-20) which was then diluted up to 1-40 and just before the operation to 1-80.

June 19th: Patient feels perfectly well to-day. Is hungry and thirsty. Temperature, 99°. Dressings removed and wound found in clean condition. Bladder washed out with Thiersch's solution and wound dressed in the same manner as yesterday. Urine is still ammonical. To be attended to in this way daily. Given salol, grs. v., t. i. d., instead of boric acid for the urine, and silica 30, for the general condition. Nux vomica ix. discontinued.

June 27th: Patient is doing well and is beginning to pass urine through penis. Kept in bed and same treatment continued.

July 1st: Parient still kept in bed, and dressed daily as before. Passes urine almost entirely through penis now. Urine normal in quality and quahtity. Passed sound, size 26 French, into bladder without difficulty. Catheter removed permanently, and an aseptic pad placed over wound, which is almost closed. This is to be changed after each micturation. Sounds to be passed every third day. Bladder to be flushed with Thiersch's solution through penis daily.

July 14th: Feels quite strong again, has good appetite and sleeps well. Functions all normal. Passes urine through penis, perineal wound being entirely healed. Allowed to get up and walk about. Urethra allows free passage of sounds, size 28 French. Internal treatment continued. Bladder to be flushed once a week with Thiersch's solution.

August 5th: Discharged at own request, cured. Says he never felt better in his life.

A special laboratory for the study of diphtheria, under the direction of Prof. Flugg, has been opened in connection with the Laboratory of Hygiene in the University of Breslau.

THE ABSORPTION OF IRON PREPARATIONS.

It is a now generally accepted fact that inorganic iron preparations are practically worthless in blood therapeutics, while organic compounds exert varying effects in the ratio to their absorbability. The albuminate preparations have a certain degree of value, because they supply in loose combination the components from which the system can compound the required form of iron—just as it is abstracted from all food. This natural form of iron, as it is found in the tissues, and particularly in the liver—where it "comprises the reserve store for blood formation"—is ferratin, as substantiated by the studies of Schmiedeberg, Marfori and Filippi, and confirmed by other equally high authorities, including Prof. Chittenden of Yale.

These investigators have proved that ferratin is present in all human organisms; that it is absorbed from animal and vegetable food, and is stored principally in the liver—"to feed the blood." When, therefore, the physician treats his anæmic patient with carefully selected diet, exercise, hygienic measures, etc., he unconsciously enlists the aid of the digestive and other organs to manufacture the required ferratin from the food ingested; this is a laborious task, because the organs are weak, and it is empirical practice, because there is too much uncertainty in trusting to the debilitated system to work its own recovery, even if useless inorganic iron preparations are added.

Schmiedeberg and Marfori having proved the identity and function of ferratin by conclusive physiological tests, which facts are now incorporated in text-books and medical literature, proceeded to duplicate natural ferratin by a synthetic process, in order to make the product available for therapeutic use; they succeeded in combining tartrate of iron with albumen by a complicated chemical process, yielding an iron albuminic acid—of *ferratin*. This product is chemically and physically identical with the natural ferratin, as it can be precipitated from pigs' liver (containing the highest percentage of ferratin among animal food) or spinach (highest percentage among vegetables), and further physiological and clinical tests have proved that this product is quickly absorbed and assimilated, supplying the requisite amount of iron to the blood without taxing the system, and increasing the appetite and quickly stimulating the vital power.

There is nothing vague about the claims for ferratin. It is a logical scientific agent, designed on careful consecutive investigations by the highest international authorities; and it has clinically redeemed every promise made for it, by increasing blood corpuscles and hæmoglobin, improving appetite and general well being, and markedly increasing body weight.

"Sajous' Annual," for 1895, quotes the unqualified clinical tests and endorsements of ferratin of such authorities (in addition to the authors of the product, Schmiedeberg and Marfori), as German Sée, Jaquet, Banholzer, John Harold and Hugo Wiener—the foremost therapeutists of Germany, Italy, France, England and Austria. In America, ferratin has been endorsed in print by Einhorn, of New York, Fackler, of Cincinnati, Chittenden, of New Haven, Perekhan, of Chicago, Spencer. of Cleveland, and verbally or in practice by hundreds of the foremost practitioners in all parts of the United States.

POPPIES TWO THOUSAND YEARS OLD.

The extraordinary resuscitating power of light received a very curious illustration a few years ago in the silver mines at Lauriam. The mines had been abandoned more than 2,000 years ago as unworkable, and consisted for the most part of the "slag" produced by the workings of the miners.

An enterprising Briton discovered that the mines contained plenty of silver, which could easily be removed by the superior modern appliances.

He discovered, however, something far more valuable than the silver, viz., some poppies of a species which had disappeared for twenty centuries, the seeds of which had lain dormant beneath the slag for 2,000 years.

When the slag was removed to the furnace the next visit to the mine found the entire space covered with a most gorgeous show of poppies.

After their twenty centuries' rest they had bloomed as vigorously as ever, without the aid of a single drop of water or any restorative other than the rays of the sun.—*Answers.*

PAT'S CRITICISM.

There's a story that old,
But good if twice told,
Of a doctor of limited skill.
Who cured beast and man.
On a "new-fangled" plan,
With the help of a strangely made pill.

On his portal of pine
Hung an elegant sign
Depicting a beautiful rill,
And a lake where a sprite,
With apparent delight,
Was sporting in sweet dishabille.

Pat McCarty one day.
As he sauntered that way,
Stood and gazed at that portal of pine,
When the doctor with pride
Stepped up to his side,
Saying, "Pat, how's that for a sign?"

"There's wan thing," says Pat,
"Ye've left out o' that,
Which, be jabers, is quite a mistake;
It's trim and it's nate,
But to make it complate
You should have a foine burd on the lake."

"Ah! Indeed, pray then tell,
To make it look well,
What bird do you think it may lack?"
Says Pat, "Of the same,
I've forgotten the name,
But the song that he sang is 'Quack, quack!'"

Dr. Martin (*Phila. Polyclinic*) has been treating a number of cases of acute and chronic gonorrhœa by the administration of sodium copaibate. This drug possesses the alleged advantages of being non-irritating to the stomach and intestines, of passing through the kidneys without exciting congestion, of acting as powerfully upon the urethral mucous membrane as balsam of copaiba.

Because of these properties apparently it can be administered in much larger doses than the balsam. Five, 10, 15 and 20 grains are given four to six times a day, and so encapsulated that they are not set free until they reach the intestinal tract.

In a series of twenty cases there was no instance of gastro-intestinal derangement, in no instance was the odor of copaiba noticeable upon the breath, there was no case of back pain, and the discharge was more favorably modified than in a similar number of cases treated by the balsam.

It is a well-recognized fact that while the copaiba in ordinary doses causes only a moderate effect upon the course of the gonorrhœa, given in colossal doses it will often check it in a surprisingly short time. There are so few people who can take these colossal doses without gastric and renal derangements that the treatment is not practicable. Should an extended trial show that sodium copaibate possesses the advantages claimed for it, it will certainly prove the most valuable of all our internal antiblennorrhagics.

"I never had anything the matter with me in my life except rheumatism," writes Chauncey M. Depew, "and I can bring that on any time by working too hard. You needn't have rheumatism, though, if you eat and drink right. Don't eat what you like, and what you want to drink let alone, and you'll never have it."

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REMOVAL.

The office of this Journal was removed, May 1st, to 180 West Fifty-ninth street, Central Park South.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 108 Fulton St., N.Y.

CLINICAL UROLOGY IN INFANCY AND CHILDHOOD.

A CAREFUL study of the urine has given us the key-note to many conditions of the system which symptomatology failed to impress upon the mind. Abnormal conditions of the urine have often led to attributing to the kidneys the origin of troubles for which they were in no degree responsible, but their existence opened the door for a logical investigation of the real cause, at the same time pointing out to a certain extent the treatment.

Thomas Willis discovered sugar in diabetic urine in 1670, and thereby differentiated between what before was classed as one disease, diabetes milletus and diabetes insipidus. It was not, however, until a comparatively recent date that it was discovered that diabetes was in no sense a disease of the kidneys, but owed its origin to a disturbance of other organs, and in its earlier stages can now be classed among the curable diseases. The presence of serum in the urine was first noticed in the eighteenth century by Cotrigno and Cruikshanks, but it had no marked significance until Richard Bright, in 1827, noticed that it was so often connected with disease of the kidney as to constitute a pathognomonic sign. Thus a new disease was discovered, linking the name of the discoverer to immortality by attaching it to the disease, which was hereafter to be known as Bright's Disease of the kidneys.

With the new disease came, in its early infancy, grave mistakes in diagnosis and in correct analysis of urine, which were not corrected until the miscroscope led to a more correct pathological condition and the excretions of the kidneys were more carefully analyzed. Bright mistook for albumin the deposits of phosphates, which so often occur in nervous people, resembling albumin in their white flocculent condition, when subjected to heat; they were speedily dissolved under the action of acid, and were entirely unconnected with nephritic trouble, but simply a waste of nerve force, to be remedied by rest and nerve nutrition.

The careful study of the urine, in which the knife, the microscope and chemical agents have each played an important part, has, during the last few years, cast a clearer light upon the nature of the constituents of the urine, and the peculiar character of the disease which they indicate. We are learning that not every deviation from normal urine points to disease of the kidneys, and that there are some normal constituents whose origin is unknown, but which may be of importance when the future investigator has revealed their real character.

The presence of albumin in the urine for a long time pointed to nephritic disease, and was one of the first and considered almost an unerring symptom of Bright's disease. We know now that the presence of albumin in small quantities is often the result of indigestion, of various kinds of food, and is by itself by no means considered as pointing with certainty to a condition of the kidneys generally diagnosed as Bright's disease. Albumin in large or smaller quantities can almost always be found in the urine of infants up to five or ten days old.

A very important feature in the study of urine, and one which has been too much neglected, is the variations in urine, both in health and disease, as associated with the different periods of life. A very valuable addition to our information upon the subject has recently been given to the public in an essay by Dr. Farraday Fegueria, of Rio de Janiero, under the head of "Urology in Infancy and Childhood," in which he deals with the symptomatology of the urine in infancy and childhood, and demonstrates conclusively the importance of possessing a more exact knowledge of the variations of urine depending upon age.

In the infant and the child the kidneys are of much greater relative importance than in the adult, and yet the attention of the physician is so much less frequently called to it than its diagnostic value demands. The greater relative importance is clearly shown by a comparison of the ratio which the weight of the two kidneys bear to the weight of the whole body in the child and the adult. In the child, at birth, the kidneys form more than one per cent. of the body-weight; the percentage steadily falls as the child grows, until the adult has ten times less the amount of kidney substance, weight for weight, than the infant. The preponderance of kidney substance in the young child is to be explained by the rapid and extreme embolism that takes place in its early age, in connection with its rapid growth. But it is not simply a matter of the necessity for the excretion of more urine, for though the child at birth takes in twenty-four hours twice as much nitrogen per kilogramme of body-weight as the adult, yet it excretes only one-sixth part, although approximately the same amount of oxygen is absorbed.

The urine of the infant is nearly neutral, the alkaline more likely to slightly predominate. Acidity, however slight it may be, in the early days of the child, leads us to suspect a defect in the alimentary system.

Diazo-reaction is constant in measles, in typhoid fever and in milliary tuberculosis. In measles it nearly always precedes the eruptive fever from twenty-four to eighteen hours, and differentiates this disease from rotheln, in which it is never present. The drazo-reaction is absent when bronchitis passes into a catarrhal pneumonia, but afterward it appears suddenly very markedly, and continues until death. This is also the case with milliary tuberculosis of the lungs, in which it has a diagnostic value.

Indican has been often described as a constituent of urine, but its presence in the urine of children was described about six years ago as an important factor in the diagnosis of infantile tuberculosis; it was said even to be pathognomonic.

If this view could have been substantiated it would have been of immense importance. The consenus of opinion, however, at the present time, is that in the majority of cases it is merely a disturbance of pancreatic digestion, and that it has no value as an indication of the presence of tuberculosis. Though it is constantly present in tuberculosis of children it is also present in a great many other disorders, and the only explanation we can reach at present is that it is the result of that profound disturbance of general nutrition which forms so prominent a feature in tuberculosis, and is generally present in any disease where that lack of nutrition exists.

In conclusion, we would like to impress upon the mind of the young physician what the experience of the veteran in the profession has already taught him, the importance in the treatment of children of the closest scrutiny of the excretions from the bowels and the kidneys.

THE INSANE COMMISSION.

THE King is dead! Long live the King! How short the interval between death and birth, the laying down of the sceptre of power, to be caught up on the instant, was illustrated at the Lotus Club the other night, when the funeral baked meats and the birthday feast followed so close upon each other as to actually mingle in the same hall and at the same table. The last strains of the funeral dirge died and faded away only to rise in more triumphant waves upon "See the Conquering Hero Comes," as Dr. Carlos McDonald relinquished the sceptre of power which he had wielded with such marked ability as President of the State Lunacy Commission to Dr. Wise, the former Superintendent of St. Lawrence State Insane Hospital, the new President of the Commission. The occasion was a memorable one, made venerable and dignified by the presence of all the superintendents of State hospitals in New York, and distinguished guests who had gathered to strew the grave of the dead President with flowers, and bind a wreath bright and fragrant around the brows of the "Wise" who was in future to wield the scepter. As our reporter looked upon the calm and placid features of Dr. McDonald, so full of dignity and sweetness, he could not help but exclaim: "If this is death, what a beautiful corpse. On the calm face of death smiles and roses are blended, and beauty immortal awakes from the tomb." One look at the new President was sufficient to show he was born with his teeth cut, and that the name by which he was baptized was a wise one. We say baptized, for no corks ever popped louder, and no more royal wine was ever quaffed by peer or king than that which flowed in great sparkling bumpers down the throats of all the alienists as they welcomed their new king.

IS THERE LIFE IN THE MOON?

RECENT observations of astronomers lead us to conclude that what has been pictured to us as a frozen world, with neither atmosphere, water, animal or vegetable life, but a dead world from which life has long since departed, may have been a hasty conclusion based upon insufficient data. The large telescope of the Lick Observatory has revealed by the slight twilight the probability that an atmosphere does exist in the moon, but of so attenuated a character that it is 200 times thinner than our own. But a still stronger evidence of atmosphere is seen in the dark band appearing between Jupiter and the moon's limb where the former begins to be covered by the latter, and for which no other explanation has been found than that it is a very light haze partly due to water vapor, which would rise a few miles above the moon's surface where it is illuminated by the rays of the sun. That there are traces of river beds there can be no doubt, but as yet no water has been observed in them. The better we become acquainted with our satellite the more convincing is the evidence that not only life exists there, as shown in the atmosphere and the water, but that the life finds expression in plants of some sort periodically growing in the deep valleys, and possibly to still higher forms of life, represented by animals and human beings. The data which are every year accumulating are sufficiently strong to give the moon a place, not among the dead, but the living.

ROENTGEN RAY IN CANCER.

M. DESPEIGNES gives the result in the *Lyons Medical* of his treatment of cancer of the stomach with the Roentgen rays. The treatment he thinks ameliorated the general condition and prolonged the patient's life for two weeks, absolutely suppressing the pain over the tumor and notably diminishing the volume. In this connection it is well to use caution in applying the ray, as Dr. Gage notices several cases of severe erythema which have followed its use. In one case a lesion over the part of a sloughing character was produced, which did not yield readily to treatment. It has been noticed also that when applied for any length of time to the head the hair at that place is likely to come out, leaving a bald spot. Like any other powerful agent the X-ray should only be used when it is hoped to obtain positive benefits. The photographs taken by the ray have been so simplified that only a short exposure is now necessary.

OXYGENATED CHLOROFORM.

A RECENT operation at the Hahnemann Hospital was performed under the influence of oxygenated chloroform with entire success, where, owing to the nephritic and cardiac condition both chloroform and ether were contra-indicated. The patient was a female, aged forty-five years, very anæmic and emaciated, with a marked mitral murmur. The microscope showed granular casts, blood, pus, pelvic epithelium, crystals of oxylate of lime, and triple phosphates. It was evident that death could not be long delayed unless an operation for the removal of the right kidney was speedily performed, that it could not be performed without an anæsthetic, and that in her condition the administration of ether or chloroform would be followed by fatal results. In this emergency, oxygenated chloroform, which, since its first introduction to the profession, has been a favorite anæsthetic at the hospital, was administered by Dr. Schall, the resident physician, and the operation performed in two hours, without the slightest unpleasant result, and followed by only slight evidence of shock. Before the operation the pulse was 114; respiration, 32; pulse during operation less rapid and fuller in volume. Time to anæsthetize, two minutes. The recovery was rapid and uneventful. Without the oxygenated chloroform the operation could not have been performed, and speedy death would have been certain.

WATER.

SOME of our ablest bacteriologists, including Steinberg and Abbott, have claimed that waters obtained from deep wells of the kind known as driven wells, were comparatively free from bacteria, and could be depended upon for their purity. The recent report of the bacteriologist of the Massachusetts State Board of Health shows this conclusion to be erroneous. From an examination of a large number of springs and deep wells this officer has found that water in the populous districts, in which the examinations have been made, obtained from even the deepest wells, is, as a general thing, not free from bacteria, many of the samples containing as numerous bacteria as are found in surface waters. Fortunately, very many of these bacteria are not only entirely harmless, but even play an important part in the vitality of healthy water. Those bacteria prejudical to health can easily be detected by chemical agents and the microscope.

PHTHISIS.

THE French Academy of Science has just appointed a committee of eminent experts to examine and report upon Dr. Francisque Crotte's treatment for consumptives, with which it is said remarkable results have been obtained. The treatment is simple, and there is nothing radically new about it. It consists merely in the use of a strong antiseptic, which is assisted in its action by a mild form of electricity. The agent Dr. Crotte employs is formaldehyde, better known as formol. This is administered in gaseous form by inhalation, and ordinary static electricity is passed through the chest.

The treatment was suggested to Dr. Crotte by the fact that post-mortems have many times shown that Nature itself sometimes cures tuberculosis in its early stages. The tell-tale scars in the lung tissue have been found in persons who at some time in their lives had suffered from incipient consumption without knowing it. Dr. Crotte therefore attempted to find some agent which would assist Nature in the process of cure.

He tried formol because it was first used very successfully for the preservation of meat. It is now largely employed in therapeutics.

Dr. Crotte has been testing for some months his cure among the poor of Paris, whom he has treated gratuitously at his laboratory. He has administered his remedy in more than 800 cases of phthisis, nearly all, he says, which had been given up by other physicians. He does not pretend to restore tissue which has been already destroyed by tuberculosis; but in 600 cases he affirms that the advance of the disease has not only been stopped, but a practical cure has been effected.

THE SNAKES OF DELIRIUM TREMENS.

IT is said that 95 per cent. of visual hallucination in delirium tremens consist of snakes or worms, in one form or another. Dr. Davis has been investigating the subject in the alcoholic wards of Bellevue Hospital with the opthalmoscope, and has brought out some interesting facts. In every one of the sixteen cases examined, the blood vessels of the retina were found to be abnormal. Instead of being pale and almost invisible, as in their ordinary condition, they were dark, almost black, with congested blood. The blood vessels of the retina, which are so small and semi-transparent in health that they are not projected into the field of vision, assume such a prominence that they are projected into the field of vision and their movements seem like the twisting of snakes. Of course, with a brain half paralized or partially excited, the active circulatory condition of the fundus of the eye may assume to the diseased imagination almost any form.

UNIVERSITY OF MICHIGAN.

THE law authorizing the removal of the Homœopathic Department of the Medical College from Ann Arbor has been found by the Supreme Court unconstitutional. This has led to the reorganization of the college. Dr. W. Dewey, formerly of this city, has been appointed to the Chair of Materia Medica, Homœopathic Therapeutics and Diseases of the Nervous System, and Clinic in Nervous Diseases. All the medical departments of the college take their anatomy, physiology, bacterological and other laboratory work together.

METROPOLITAN HOSPITAL.—The facilities which the wards of this great city hospital offer for clinical instruction are not surpassed by any in the city. Clinical lectures are held every Wednesday afternoon, which are freely open to the advanced student and the general profession. The abundance of clinical material may be estimated from the fact that more than 8,000 patients pass through its wards every year, including almost every variety of diseases except the contagious, which are not admitted. Last year surgical operations numbered over 800, which included every variety of operation the surgeon is called upon to perform in general practice. The bacterological and microscopic departments are under the care of men who are familiar with the most advanced methods of prosecuting this work.

THE Vienna *Medicinische Wochenschrift* of July 18th contains an interesting article on the hygienic reforms and sanitary regulations introduced in Bosnia and Herzegovina by two female physicians during the past three years. In 1895 the Government appointed for this purpose two women, Dr. Krayevska and Dr. Keck, at a salary of 1,600 florins, ($740) each, hoping thereby to promote the health of the Mohammedans, who constitute about 35 per cent. of the population. The aversion of the Mohammedan women to medical treatment by men had hitherto been so strong as to render it almost impossible to apply remedies for their personal infirmities or to enforce sanitary ordinances in their dwellings. It is well-known that the prevalance of anæmia among Mohammedan women is due in part to the lack of bodily exercise in the open air, and still more perhaps, to the exceedingly imperfect ventition of their houses. Also, the custom of nursing their children for several years is highly injurious to themselves and to their offspring. The patients numbered 1,258 in 1893, 1,382 in 1894, and 1,517 in 1895, and consisted chiefly of the wives and children of merchants, mechanics, peasants, and Government officials. By their tact and professional skill Drs. Krayevska and Keck have won the confidence of the Mohammedans and already succeeded in alleviating much unnecessary suffering and in reducing considerably the percentage of mortality. The inspection of the houses is now attended with no difficulty, and the general health of the inmates has been greatly improved. The poor are treated gratuitously, and regular reports embodying statements and suggestions are sent to the Government. The two physicians are liable at any time to be sent on sanitary missions to remote districts or assigned to duty in the hospitals. We may add that they were appointed as the result of a competitive examination, and that all candidates for such positions must submit to the same ordeal. Recently a female dentist, Emilie Edel, of Vienna, has begun to practice her profession at Mostar, the capital of Herzegovina.

THE brilliant and statesmanlike appeal of Dr. Timothy Field Allen, of this city, sent broadcast over the State, that every Homœopath in the State should vote for Roswell P. Flower for Governor, because he was a Homœopath, has been caught up by an enthusiastic Presbyterian in Nebraska, who urges every Presbyterian in the United States to vote for William Jennings Bryan for President of the United States because he is a member in good and regular standing of the Presbyterian Church. Roswell P. Flower was elected Governor, but how much the appeal of his family physician, Dr. Timothy Field Allen, contributed to his success, will probably never be revealed.

A CODE OF ETHICS.—The London *Times* does not approve of the suggestion of a new code of ethics to be issued under the auspices of the British Medical Association, and very sensibly says: "Professional ethics cannot be put into a written code. They are essentially unwritten, but none the less distinctly understood by every one who is sufficient of a gentleman to warrant his being admitted into a profession which should be a profession of gentlemen. They are essentially unwritten. To write them would be to spoil them. They are like the aroma of some flowers—an aroma which when concentrated becomes offensive.

SCABIES.—As a remedy for scabies in children, Dr. Monti, of Vienna, employed the balsam of copaiba in twenty-seven instances, and in each case effected a complete cure. Each child was first washed with soap and water and then rubbed all over twice a day with the balsam. No other application was made. He found the itch could not live in the balsam beyond two or three hours.

TUBERCULAR MENINGITIS.—Dr. Jacobi says the best general preventive treatment of infants and children with a predisposition to tubercular meningitis, rendered probable by hereditary taint and by suspicious symptoms, consist in the regulation of the diet and hygiene; animal food mostly, daily cool or cold bathing, with vigorous friction, open windows, exercise, cod liver oil during the cool and cold months, arsenic in regular small doses, and pure guaiacol for many months in succession.

ON Monday, October 5th, 1896, city Civil Service Boards will hold a competitive examination at their offices (new Criminal Court Building) for the position of House Physician at Bellevue Hospital. This position requires a knowledge of the treatment of the insane, and pays a salary of $1,200 per annum. Citizens of the United States, residents of New York State, may present applications to Mr. S. William Briscoe, Secretary.

ACNE.—The latest researches into the etiology of this most disagreeable trouble shows it to be a local rather than a constitutional trouble, and as it is due to a parasite it can only be controlled by the local treatment which will destroy the parasite. It is usually necessary to puncture the acne with a proper instrument, and then apply just a local irritant to kill the parasites, followed by some soothing application.

ABORTION.—Dr. Duhrssen produces abortion by packing the uterus cavity with iodoform gauze, and fills the vagina with salicyate wadding. In a few hours the pains begin and in a few hours cease. On removing the wadding the contents of the womb are generally found in the vagina.

MALARIA IN CHILDREN.—Dr. Moncorvo says in cases where a child's stomach will not tolerate quinine he has found excellent results from alcoholic extract of the leaves and blossoms of the sunflower, in doses of 1-6 grain in twenty-four hours.

RESORCIN will be found an efficient remedy in those forms of diarrhœa where an antiseptic is required, and as an ointment, thirty to forty grains to the ounce in ring worm, scoberrhea, particularly of the scalp, and all the class of parasites affecting the skin.

THE friends of Virchow, the great German pathologist, are making extensive arrangements to celebrate his seventy-fifth birthday on October 13th.

DIABETES.—To remove the thirst moisten the tongue with five or six drops of a solution of a half grain of pilocarpine in twenty drops of alcohol and a drachm of water.

BIBLIOGRAPHICAL.

Lea Brothers & Co. have in press "A Treatise on Obstetrics," by Edward P. Davis, A.M., M.D., Professor of Obstetrics, etc., in the Philadelphia Polyclinic.

Prof. Davis' new work, we are told, will afford students and practitioners a concise yet comprehensive guide to the whole art of obstetrics in its most modern development. The author is widely known as a teacher, writer and obstetrician of unsurpassed ability. His thorough acquaintance with foreign literature has enabled him to place at the command of his readers the best material derivable from the vast sources of obstetrical knowledge in the Old World, and his own ripe experience and metropolitan facilities have been equally well utilized in the preparation of the volume at hand. A marked and attractive feature will be found in the exceptionally rich series of engravings, among them being a large number of photographic reproductions of obstetrical scenes, carefully selected in view of the amount, vividness and permanence of the knowledge which can be so well conveyed in no other way. The book will likewise be embellished with a number of most instructive colored plates. It will be found more comprehensive than ordinary treatises, as it deals with those cognate subjects best handled in close connection with their obstetrical precedents, such as the repair of lacerations and injuries, the care of the mother, of the infant, jurisprudence of midwifery, etc. A foremost place is confidently anticipated for it both as a textbook and as a work of reference for practical use.

The same publishers have also in press "A Practical Treatise on Medical Diagnosis," by John H. Musser, M. D., University of Pennsylvania.

Prof. Musser's work has easily achieved the foremost place as a full and systematic treatise on the practical side of its most important subject, a fact rendered clear by the prompt exhaustion of the first edition. The author has taken advantage of this opportunity to give his work a thorough revision and to incorporate in it a full account of all trustworthy advances that have been made in its department, one of the most progressive in medicine. Every page will show evidence of revision, and the work will be enlarged not only in text, but also in illustration, by the addition of numerous handsome engravings in black and many full-page plates in colors. The position of "Musser's Diagnosis" is assured as the leading textbook for students and equally the best reliance of the physician.

An American Text-Book of Applied Therapeutics, for the Use of Practitioners and Students. Edited by J. C. Wilson, M.D., of the Jefferson Medical College, Assisted by Augustus A. Eshner, M.D., of the Philadelphia Polyclinic. Philadelphia: W. B. Saunders, 1896.

The arrangement of the book has been based, so far as has been possible, upon modern pathological doctrines, beginning with the intoxications, and following with the infectious diseases due to internal animal parasites, diseases of undetermined origin, and finally the disorders of the several bodily systems—digestive, respiratory, circulatory, renal, nervous, cutaneous, and also the disorders of pregnancy. We are glad to see the author has adopted the clinical and practical method of presenting the subject, indicating the course of treatment to be pursued at the bedside rather than to name a list of drugs which have been used with more or less benefit. The contributors are all Americans, with the exception of two, and the subjects discussed from the American standpoint of modern pathology and applied therapeutics, into which have been incorporated the best thoughts of the scientific world.

The article on malaria, by Prof. A. Lavaran, who first discovered the malarial parasite and advanced the theory of its action in producing malarial trouble, and that by Dr. Rake, whose uncompleted work on leprosy has attracted world-wide attention among scientists, are the only two articles by foreign authors in the book. These articles are of such vast importance in their originality and in the clearness of their statements that the editors have been fortunate in obtaining them for this volume. We have only words of strong commendation for the entire work.

A Manual of Clinical Diagnosis by Microscopical and Chemical Methods. For Students, Hospital Physicians and Practitioners. By Charles E. Simon, M.D., Late Assistant Resident Physician Johns Hopkins Hospital, Baltimore. In one very handsome octavo volume of 504 pages, with 132 engravings and ten full-page colored plates. Cloth, $3.50. Lea Brothers & Co., Philadelphia and New York: 1896.

The application of chemical and microscopical methods in the determination of disease is authoritatively and clearly explained in this volume. Dr. Simon has had the advantage of acquaintance with the best methods developed in European clinics and laboratories, and to this he has added the experience gained in private practice and in one of the largest and most advanced American hospitals. Readers of this work will find complete and thoroughly practical explanations of the diagnostic indications which can be obtained from the blood, secretions of the mouth, the gastric juice and contents, the fæces, the nasal secretion, the sputum, the urine, transudates and exudates, cystic contents, meningeal fluid, semen, vaginal discharges, and the mammary secretion, so plainly set forth that the practitioner or student who has not had special training in such manipulations may nevertheless be enabled to obtain satisfactory results. The work is abundantly illustrated with engravings and full-page plates in colors.

Practical Diagnosis. The Use of Symptoms in the Diagnosis of Disease. By Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia; Laureate of the Medical Society of London; of the Royal Academy in Belgium, etc. In one octavo volume of 566 pages, with 191 engravings and thirteen full-page colored plates. Cloth, $4.75. Lea Brothers & Co., Philadelphia and New York. 1896.

Prof. Hare has struck a new line in book making, by simply following out the line usually adopted in clinical teaching by discussing first the symptoms used in diagnosis, thus leading up by natural steps to the positive conditions and the disease itself. Thus instead of describing locomotor ataxia or myelitis he starts with the feet and legs, considering carefully each symptom, and speedily reaches a differential diagnosis between the same form of trouble which would be likely to affect the legs and feet. An index of diseases refers to the various symptoms which constitute its clinical picture. Conversely, the index of symptoms, organs and terms furnish a ready reference list of the various diseases in which any given symptoms may appear as a feature. The work, like everything which proceeds from the pen of Prof. Hare, is full of practical information, showing ripe judgment in its preparation.

Veterinary Homœopathy in Its Application to the Horse, Including a Code of Common Suggestive Symptoms. By John Sutcliffe Hurndall, Member of the Royal College of Veterinary Surgeons, England. Boericke & Tafel: Philadelphia, 1896.

The author has aimed to furnish in clear and concise language information which will enable those in charge of horses to diagnose to a certain extent their condition, and apply the remedy. The author is writing for the people, and to make it comparatively easy for them to discover the ailment he has prepared a list of suggestive symptoms, indicating the diseases in which these symptoms occur, and pointing to the proper treatment. This plan will be found of material help to those not familiar with the anatomy or physiology. The work is prepared with marked intelligence, and will prove of great value to every owner of a horse.

A Manual of Clinical Diagnosis by Means of the Microscope and Chemical Methods. By Charles E. Simon, M. D. With 132 illustrations on wood, and ten colored plates. Lea Bros. & Co., 1896.

The subject matter covers the examination of the blood, the secretions of the mouth, the gastric juice, fæces, nasal secretions, sputa, urine, trausudates, exudates, cystic contents, semen, vaginal discharges and milk. In every case a description of normal material precedes the pathological considerations, which latter in turn are followed by an account of the methods used in examination; chemical and microscopical methods are described in detail, so that the student and practitioner who have not had special training in such manipulations will be enabled to obtain satisfactory results. The increased accuracy in medical diagnosis, in which chemical reagents and the microscope play such an important part, renders a work like this an absolute necessity in the physician's office. As in the various forms of fever, for instance, so much depends upon a correct diagnosis in treatment, and it is often so difficult to differentiate between the various types by ordinary symptoms; here the microscope comes in and with almost unerring certainty.

Treatise on Spermatorrhœa, Impotence and Sterility. By William Harvey King, M.D. New York: A. L. Chatterton, 1897.

The diseases enumerated in this book are treated from a neurological standpoint, the author giving good reasons for, a belief in which many of our best thinkers fully share, that they are mostly of a neurological type, and that the remedy in most cases is to be looked for in hygiene and a careful study of the materia medica rather than the knife. The work is evidently the production of a careful student and an accomplished scholar, the text being clear, well expressed and logical, and the remedies suggested, especially the hygienic measures, excellent.

Gen. Horace Porter, whose article on "Campaigning with Grant" will be published in the *Century* the coming year, owed his position on Grant's staff to the latter's steadfastness of purpose. Gen. Porter, then a captain in the artillery branch of the service, was introduced to Grant at Chattanooga in 1863. The commanding officer saw in the young artillerist one who could be of service to him, so he asked Gen. Halleck to assign Porter to his staff. Capt. Porter, who was the son of the Governor of Pennsylvania, had been graduated third in his class at West Point, and his brilliant service in the field had brought him an appointment in the Ordnance Department at Washington. Gen. Halleck refused to make the transfer, and even appeals to Secretary Stanton by both Grant and Porter were of no avail against Department red tape. It was not until Gen. Grant was placed in supreme command of the army that he succeeded in carrying out his purpose, and Porter was made one of his aides. From that time until the close of his first term as President, no man was closer to Gen. Grant than Gen. Porter.

Marion Crawford has written a new story especially for *The Century*,. It is called "A Rose of Yesterday," and will commence in the November number and run for six months. The story opens in Lucerne, and while it is entirely separate in interest, some of the personages that appear in it will be familiar to readers of "Don Orsino." It is wholly romantic in its character, and in point of literary ability quite equal to anything which has appeared from the pen of the gifted author.

The fact may not be familiar to members of the profession out of the city that the New York Hospital Library, in Sixteenth street near Fifth avenue, is the largest, with the exception of that in Washington, of any in the United States. The library and reading rooms are open, free to all, and are rich in every department of medical literature. The Library of the Academy of Medicine, in Forty-third street near Fifth avenue, is also free to the profession.

The eleventh edition of Mr. Charles Marchand's book on the therapeutical uses of his "peroxide of hydrogen, hydrozone, glycozone and eye balsam" has been received. It is exhaustive of the subject, and covers 216 pages. Our readers may receive complimentary copies upon application and mention of this journal.

CORRESPONDENCE.

TYPICAL "HOMŒOPATHY."

The "similimum" of the Homœopathic physician has been described as an elastic bag into which one can cram anything, and it is the purpose of this paper to inquire if many a true thing is not spoken in jest. To that end I shall present a report of a case that was accepted without one word of protest by the American Institute of Homœopathy at its last session. I shall cite the printed report of this case from a copy that was obtained from an attendant at that session, so that my reader will have "the original Jacob" to judge.

PROGRESSIVE MUSCULAR ATROPHY, PRONOUNCED INCURACLE BY EMINENT NEUROLOGISTS, EXAMINED, TREATED AND CURED BY HOMŒOPATHY.

A young married woman who is a good comrade to her husband, an athlete, has been in the habit of entering into all his out-of-door sports, golf, hunting, shooting, and, especially during the past summer, swimming (long distances), complained of pains in her right shoulder, which increased until her arm became helpless; the muscles about the shoulder and right side, chest and back wasted, so that the whole region became perceptibly emaciated, the sub-clavicular region especially sunken; the shoulder drooped, and if the arm were permitted to hang down the head of the humerus would actually slip out of its socket, often causing extra pain in the axilla and shoulder; it became impossible to put her hand to her head, so that she could not put up her own hair, nor could she dress herself. The wasting and powerlessness involved at last the whole shoulder region of the right side of the body, pectoral, scapular, and axillary regions, and the arm, as far as the elbow. Soon the trouble invaded the forearm, and began to show itself also in the right hip and thigh. Eminent specialists were consulted, electricity, galvanism, massage and many other injurious expedients were recommended and tried with steady decline, and the husband was told that the disease could not be and had never been arrested. Finally, after the recovery of the husband's mother (in the house of an Allopathic physician, who was her son-in-law) from pneumonia, complicating chronic interstitial nephritis, the husband of my patient, who had been informed by the attending and consulting Allopathic physicians that his mother could not recover, appealed in despair to me to try Homœopathic treatment for his wife. The symptoms of the case were as follows: 1. Pain in the right shoulder extending from the top down the arm to below the elbow. This pain was a constant, dull ache, becoming, on motion, a sharp, shooting; the pain was worse at night, in the wind, in the cold, on uncovering and when lying on the right or painful side. There was a feeling of powerlessness. (She could not raise the arm to the head, nor could she dress herself.)

How is a remedy to be selected? No cases, cured, are on record, so that clinical data are wanting. No drug has been known to produce such a condition, in its pathology (if there be any satisfactory pathology known); the etiology is obscure; only the symptoms can come to the rescue.

On January 4th a prescription was made. January 22d: The record states decided improvement, very little pain, can now lie on the right side with comfort, which for months she has been unable to do. February 15th: Continued gain; the shoulder does not any more slip out of joint, as formerly; she is a trifle fleshier now over the right pectoral and shoulder regions. February 28th: Can dress herself—a great gain, naturally noticeable in the household economy; the arm gets tired only after use, but not immediately after; is growing perceptibly stouter. March 2d: Complains of drawing pain in the front of the right hip and thigh; finds it difficult to go up stairs on account of this pain, which has been getting worse for a week past; the whole right leg feels heavy and weak.

Calcarea Carb.—This prescription was effective at once as to the lower extremity, but it was followed by aching in the forearms and palms of the hands after any attempt to use the hands or arms, with occasional pains about the elbow. Return to the first remedy.

March 30th: Great improvement; uses both arms freely now without pain, no pain at night, is able to lie on the right side without any discomfort.

Since that time there has been no return of the former troubles; an occasional disturbance of digestion, due, apparently, to inability to exercise as much as she has been accustomed to, has required a corrective, but lately the lady has resumed, cautiously, her active life out of doors, and is rejoicing in her renewed health, and is able to wear her evening dresses with grace and satisfaction.

Symptom-Analysis: 1. Region of shoulder. 2. Right upper extremity. 3. General weakness. 4. Aggravation from lying on the right side. 5. Aggravation from lying on the painful side. 6. Aggravation at night. 7. Aggravation after becoming cold. 8. Aggravation in the wind. 9. Aggravation from uncovering.

The above points cover essentially the totality of the symptoms. Noting the value of the remedies, on a scale of four (Boenninghausen method), under each point (values estimated by the provings, reinforced by clinical experience), we find as follows: Nux. vom., 30; phosphorus, 20; silica, 28; bryonia, 27; pulsatilla, 26; mercurius, 25, etc.

These furnish a list for study and comparison. My first impression was to give nux vom. first, especially in view of the stimulating, Allopathic treatment, electricity, galvanism, massage, tonics, etc., but a little study convinced me of the greater similarity of phosphorus, especially as the mental state of my patient was not at all similar to that of nux vomica; accordingly, I prescribed phosphorus in the seventh centess potency, doses repeated three times a day for three days, after which only an occasional dose was prescribed, except when suspended to administer three doses of calcarea carb. for the manifestations of the trouble in the right hip and thigh.

In regard to my failure to report in connection with the above narrative the results of various tests of sensation, motion and the general reactions, I can only say that such tests in no way affected my selection of the remedy, for none of the provings have noted them, and the diagnosis made by the specialists included all of them and probably more, which served to establish their diagnosis (and prognosis), but left them wholly in the dark as to the proper treatment. The point here made is that the *totality of the symptoms* and *not the diagnosis*, in this case, at least, sufficed to cure.

The above report is not submitted as a rhetorical *tour de maitre*, although its author sports "LL. D." as a literary *appendix vermiformis* to his name; nor is our LL. D. an Irishman, as might be rashly inferred from a "diagnosis," or a "totality of the symptoms" sufficing to cure a disease.

But it is the elastic bag—the *totality of the symptoms*—that we are to consider in the specimen brick that a professor of materia medica offers to a national medical society.

So far as relates to the knowledge which a physician, to say nothing of a medical professor, should possess, and so far as relates to the application of the teachings of Hahnemann's Organon are concerned, the above "cure" is only a pitiful "fluke;" a happy one for that patient, of course, but nevertheless a "fluke," and only that.

As a true Homœopath he should have included the *mental symptoms* in his "Symptom-Analysis." Why he terms a *complex* an "analysis" we need not stop to inquire. It appears to be, for him, a synonym for "totality of the symptoms," but it is neither in name or in fact.

He also omits the sensory element of the case from his "totality." The constant, dull ache, becoming a sharp, shooting pain on motion, would not have been ignored by Hahnemann. Moreover, this Homœopathic professor of materia medica includes the modalities of position, time, temperature, but magisterially excludes the aggravation "on motion." This important element would not have escaped Hahnemann. Here, then, are three absolute elements of *the* totality left out by a teacher! As if there were a choice in filling the elastic bag!

But the sins of omission do not end here; there is the emaciation of the affected parts, and also the laxity of muscle that allowed the head of the humerus to slip out of its socket. Why are these not included? Boenninghausen's "Repertory" contains a special rubric for each of these disease elements. Why does a professor of Homœopathic materia medica, at his own sweet will, ignore both the *totality* and the "Repertory"? It is, indeed, a "nasty" question, but a sanitarian like myself doesn't mind that "when duty calls"; no, sir, I am not built that way!

But, and worse yet in a professor, why does our "guide, philosopher and friend" entirely overlook the significant fatty degeneration that was present? Alas! Boenninghausen's "Repertory" has no rubric for that, nor has the pathological fact yet fructified our professor's anterior lobes.

We can pity the "fix" of our poor totality professor in regard to the dull, aching and the sharp, shooting pain, for these are not in Boenninghausen, from which it would appear that it is Boenninghausen's "Repertory," and not Hahnemann's "Materia Medica" that affords his "totality."

Thus far, the professor's elastic bag is noteworthy for what he arbitrarily excludes from it; but let us turn to what he crams in. Here is a rag labeled "General weakness." How he deduces this condition from his own report of the case is a poser. It must have been evolved from his inner consciousness. True, in Boenninghausen's "Repertory" "weakness" appears; but how our professor gets weakness of the special parts denoted in his report is not apparent. Is it not an elastic adaptation, because in Boenninghausen's "Repertory" under that rubric phosphorus appears as *Phos?*

If our professor had opened the very "Boenninghausen" that he edited, he would have found, on p. 157, "Emaciation." And, lo! there stand both phosphorus and nitric acid in large caps.—PHOS., NIT. AC. Turning again to p. 195, he would have found the same two remedies wearing the same typographical large caps. Now suppose that both nitric acid and phosphorus had stood at that hypothetical "30" in this case, I will ask the professor of materia medica why he should in that instance give phosphorus and not nitric acid? "'Tis sweet to be remembered," and I will leave him my little conundrum to that end.

This professor of rheumatic rhetoric writes: "I first thought I would give nux vomica first." That sentence resembles an amphisbœna, in that it is alike at both ends; but what a creature for a professor of materia medica to beget! One could admire his capacity for "alternate generation" indefinitely were it not that he appears even funnier in another aspect—namely, a professor of materia medica deciding to give phosphorus rather than nux vomica in a case of progressive muscular atrophy *from the mental symptoms!* This might do for a green graduate who cannot "differentiate" between the dot over an i and a fly speck; but for a professor and a professor of materia medica at that?

"Who would not weep if Atticus were he!"

But the explanation is at hand, for you will remember this professor asks "if there be any satisfactory pathology known" of progressive muscular atrophy. Of course he means *pathological anatomy*, but you must not expect him to say what he means, or, more than half the time, to mean what he says.

Now let us aid this Homœopathic Samson by putting the pillars of Philistine Allopathy within his grasp. One pillar, my dear blind professor, is that in the tenth of Dr. Fox's "Lectures on the Pathological Anatomy of the Nervous Centers"—it begins at p. 266—you can find the "pathology" of progressive muscular atrophy. If this twenty-four-year-old book doesn't suit you, please turn to Dr. Buck's "Reference Handbook of the Medical Sciences," Vol. VI., p. 572. There you will learn what an essential part of "the totality of the symptoms" fatty degeneration of the muscles is in progressive muscular atrophy.

The other pillar, my much admired professor, is that a teacher of materia medica should know that phosphorus produces fatty degeneration of the muscles; that, sir, is what the *emaciation* and the *weakness* in your case *mean*. Now pull at the pillars and then get yourself cremated, for such carrion should not be allowed to taint the air of a medical college.

Alas! that a gray-haired Homœopathic physician should be obliged to say to the American Institute of Homœopathy: "Such be thy gods!"

Query for non-Homœopathic readers: Brethren of the older school, does not the internal evidence of this case show that progressive muscular atrophy is verily curable by internal medication? Forget the "school," think only of suffering humanity before you reply. Think, too, of the slender thread that was the Ariadne clue to the cure. If by it such results are reached, and by even such a caricature upon the physician, what might it not accomplish in hands that would not put trash into the elastic bag of the "similimum?" S. A. JONES.

Ann Arbor, Sept. 8th.

CITY AND COUNTRY DOCTORS.

To the Editors of the NEW YORK MEDICAL TIMES:

In the issue of July 18th of the *Medical and Surgical Reporter*, of Philadelphia, I find an editorial styled: "Peripatetic Professors and the Schools for the Profits." One of the legitimate functions of the editor of a public journal is to "catch folly as it flies, and hold the mirror up to Nature," and certainly, in the present instance, the editor in question has caught a folly very effectively, and as effectively held it up and reflected it in the mirror of Nature and of truth. The purport of the editorial article is to put in full evidence "the manœuvres of that class of city physicians who are desirous of building up a consulting practice among their professional brethren who are located in some country town." In the first place I would say to the editor of the *Reporter* that to undertake to record the "manœuvres" of the profession in the efforts to secure practice, whether legitimately or illegitimately, would be like attempting to count the individual pieces of a stratum of mosaic that would cover Broadway, New York, from end to end, or his own favorite promenade, Chestnut street, Philadelphia. To his citation of manœuvres, he adds: "There is ground for both compassion and a certain sort of indignation also in watching the country practitioner and his attitude to the same city brother. The place where the performance, in all its absurdity, can be best seen, is at the meeting of some suburban medical society." Can the editor wonder that the city physician, especially he of "peripatetic piratic stamp" who is intent upon securing "consulting practice," should eagerly appropriate and avail himself of the very pliant subserviency of the "country practitioner," who is willing to "crook the pregnant hinges of the knee, that thrift may follow fawning?" Fact is, the crooking is a mutual professional barter and trade business, and mayhap, in many instances, a shifting of professional responsibility from country shoulders to city shoulders, and in this respect the rural man certainly does "hold himself cheaply," and betrays, not only humiliating subserviency, but a timorous want of self-respect and confidence that is sure to go along with ignorance, and the lack of professional education and acquirement. Again, says our editor: "What if he—the country practitioner—has not connected his name with some institution for pauperizing the public, as a hospital, or with a college, whose main *raison d'etre* seems to be the self-advancement and aggrandization of those connected with it." It seems very evident that the editor of the *Reporter* has never belonged to or had any personal or practical knowledge of the constituent elements of a faculty of a medical college, as nowadays constituted, or he would know that in the estimation of said elements, each one for himself, he carries within himself the consciousness of possessing the sum and substance of all wisdom and knowledge, and an aureole encircles his brow and sheds its light upon whoever may be so blest as to come within its beneficent rays. But, *per contra*, and "*haud inexpertus loquor*," if a man desires to add to his knowledge of human nature and its shortcomings, let him become a member of a faculty of a medical college, and he will soon be able to gauge the height and the depth, the length and the breadth, and every other measurement of the selfishness, the ignorance and conceit, the trickery and treachery and other debasing qualities that so often discredit and degrade the profession, and hold it up to public contumely and contempt. As one of the immeasurable examples of ignorance and conceit to be found among those holding high and exalted positions, at least in their own view, an instance may be cited of a distinguished surgeon—now among the majority—who, on one occasion, and before proceeding to the performance of an operation in a prominent hospital in this city, took the opportunity to "spread himself" and air his classics, and thus exhorted his pupils: "Take care," said he, "that you are devoted and diligent in your studies, so that the *voice* of the *vox populi* may speak favorably of you," and his look of supreme self-satisfaction, as he ripped and tore out a tumor of the antrum, was a spectacle for gods and men.

This little sketch may be taken as a true presentment of what our editor further signifies as "the so-called 'great' professors." His portraiture of "Dr. Bigwig from the city," as he "listens to the 'little talks' of the country doctors, with an air of calm superiority, benignly patronizes the papers that are read, and with an air of condescension impossible to fitly depict gives his comments thereon," is most admirably given and cannot be improved. It's to the life, and suggestive of Sangrado, Dr. Ollapod, and more modernly, of that immensely clever sketch by Charles Lever, of Charley O'Malley and his diagnosis of a "stay-at-home-with-us" steatomatous tumor, which everybody who has read it—and who hasn't?—must remember with renewed mirth and rib-tickling enjoyment. Our editor made another capital point in saying that: "The country doctor is the natural brake upon the profession. To his caution is due the fact that so many meretricious discoveries and inventions, at first exploited as the greatest of advances in medical science, find their true level, and often sink into oblivion." In this category may be reckoned also the horde of specialists and pretenders that prey upon the public and grow fat upon the pabulum of public credulity.

Let us turn over the stock in trade that "Dr. Bigwig, from the city," carries along with him when he goes upon one of his intermittent rural foraging expeditions, and see of what it really consists. He may have been somewhat in advance of his less ambitious and energetic confreres, and have read in some foreign journal of the wonderful efficacy of a new remedy for the alleviation and cure of one or more of the human ills that are the "opprobria" of the nosological record. He may be like our friend of "the voice of the *vox populi*," and have secured a veneered and spurious reputation as a surgeon or specialist in the use of roots and herbs, or mayhap the cure of phthisis with chopped beef, or ozone or some other gas—of which rejuvenating element he always has a liberal supply on hand—or, forsooth, hypnotism may lend its soothing and soporific aid, and he may put 'em to sleep—ay, and sometimes they don't wake up again! But then there comes the comfort of hearing from them on the other side, and so his other function of spiritualism adds another boon to his afflicted patients, and they raise pious eyes heavenward and in rapt contemplation of his manifold powers, exclaim: "Thank God for the good and great doctor! What a man, to be sure!" What do we see to-day in attestation of the truth of this picture of human credulity and folly and of the "base uses" employed in the profession—disciples of Father Kneipp walking barefooted in the wet grass in Central Park the latest? It recalls the wearing of an amulet to keep off spooks, or carrying a horse chestnut in the breeches pocket to keep off rheumatism, or the blind faith in moonshine attenuations, and other puerilities of Homœopathic infinitesimalism. And yet "Dr. Bigwig, from the city," grows and flourishes in country towns, and the rural medico still crooks and fawns. But while the ignorant and superstitious may bend in humble and pious genuflection before the shin bone of a saint, there is no excuse for the self-abasement of the country doctor in his subservient adulation of Bigwig from the city. As our editor says: "He has access to the most advanced medical literature of the day in the pages of the medical journal, and has a line of practice that often in variety can compare with the cases brought before the staff of a hospital." May we remind our editorial friend just here of another of the numerous influences that affect and are felt not only by country physicians after they shall have embarked upon professional duty, but also by others living in cities? To many of both classes college influences, of a personal character, and other, continue in after life, and there is no more succulent nutriment for the growth and thrift of bigwiggery than a certain loyal sentimentalism towards *Alma Materdom*, and "my professor," and upon it, as it courses through its vasa chylifera, bigwiggery waxes sleek and strong and triumphant. True, the country doctor has access to the most advanced medical literature, etc., but does he always avail of it? Bigwiggery may be "a delusion and a snare," but it affords asylum and a refuge to those to whom medical literature is a sealed book and a constant reproach.

Our editor gives another most amusing and illustrative anecdote of bigwiggery of "the peripatetic piratic stamp": "At a meeting of a New England society some years ago, a paper upon consumption was read. Bigwig, from New York, was present. He was one of the above named stamp, and was diligent in impressing upon the country doctors that he was one of the best men to call in consultation when 'more light' was needed. The paper in question was a valuable one, dealing with the contagiousness of the disease, and with means for prolonging life with comfort to the patient and those in attendance. The criticism was that the essayist was behind the times, since lung diseases could be greatly benefited and even cured by the introduction of H_2S into the rectum three times daily, compelling the patient to hold the gas there for at least ten minutes. An arrangement of bottles, rubber tubing, etc., was shown, the gas was generated and instruction was given as to the method of operation, together with very large statements of 'cases' where remarkable improvement had been recorded. All the country doctors stood agape and asked questions until the visitor swelled with importance." But just then there came one of those climaxes that would have been cataclysmic to any other but to him of the peripatetic, piratic stamp, for, as related by our editor, "one dissenting brother, old in practice, was promptly frowned down for venturing the remark, *sotto voce*, that he thought just as good results could be obtained by feeding the patient on beans, and then corking up the vent for the gas to escape." Here's an instance of the piratic energy of "Bigwig from the city." In some foreign journal he first espied this idea, then new, now old and exploded, of the introduction of the gas into the rectum for the cure of consumption. He immediately packed up his bottles, and tubes, and squirts and things and other belongings, not forgetting the gas, which he stowed away in his head, where there was, no doubt, plenty of room for it, as cerebrine was scarce, and hied him away upon one of his aforesaid intermittent rural foraging expeditions, with the conviction of rural professional simplicity in his eye, and the scent of plunder in his nostrils, and with the pleasing consciousness that, like the schoolmaster in dear "Old Noll's" sweet story, it would be with him too that:

> "Still the wonder grew
> That one small head could carry all he knew."

So, then, the bean suggestion made by old hard-headed and common-sense rurality didn't "phaze" him at all. Bless your soul! No, not a bit of it! Bigwig don't mind a little thing like that! His hide of self-conceit is as pachydermatous as that of the rhinoceros in Central Park, and as impenetrable as though a mosquito tried to get the other side of it. When he goes ruralizing, his phylactery, "I am Sir Oracle, and when I ope my mouth let no dog bark," emblazons his forehead, to be seen of all men, for he's from the city, and belongs to a college too, don't you know? He brings healing in his wings, for he's got gas, H_2S, and lots of it, too, and of other and various kinds, don't you know? You can scent him far and wide. He doesn't need beans to inflate him; he's as full as a tick always.

So does Dr. Ventose play his little game, and, as our editor wisely continues: "The same plan of humbuggery is practiced to-day, and the city man is received with as much deference as he was then. What if he has dropped all his first great discoveries, and is now advancing other theories? What if his airs of patronage are insufferable to some, etc." Thus far, I have followed the editor of the *Medical and Surgical Reporter* with full interest, and thorough approbation of his humiliating exposure of professional fraud and barefaced insolence. It is impossible to consider or to estimate such a character as this, such a blot upon the fair fame of the profession, seriously, or except "de haut en bas." While upon this subject of professional humbug and pretention, I would cite another form in which the creature flaunts himself, and that is as the traveled doctor, who has "done" the medical schools of Europe, and has returned full of H_2S and other vacuities, so far as any real or substantial benefit he may have derived from his sojourn abroad is concerned.

In this connection I am reminded of an argument I once held upon some subject, now forgotten, with a traveled party—he was not a doctor, however—in which to escape defeat, which seemed imminent, he took to water with the parting fling that might be called by the old saying "the refuge of the destitute," but which he no doubt thought would be a crusher. "But, doctor, I have traveled." "True," said I, "and so has your trunk." One of those wonderful old fellow-laureates, from Chaucer down to the marvelous Elizabethan Era to "rare Ben Jonson," and onward. John Dryden summed up this entity of the genus homo in words that scorch:

> "How much the fool that has been sent to roam
> Exceeds the fool that has been kept at home."

There is doubtless truth in the following from our editor that: "The majority of city practitioners are not of the peripatetic, piratic stamp. They attend the meetings of country societies with a sincere desire to benefit by the ideas of their confreres, are prepared to give and take in the highest sense of mental exchange, and one will not find these men assuming that they are only giving, but will acknowledge a failure, and even have been known to tell of losing a case." Our editor has certainly begun a wholesome expurgation of some of the unworthy practices that degrade the profession. There are others. It is to be hoped he'll go on weeding out and extirpating the tares that choke the healthy growth and successful husbandry of the field of professional honor and good repute. He is evidently amply able to undertake the good work, and it may be truly said of him that he is "a chiel amang ye, takin' notes." Let him continue to "tak' 'em," and "prent 'em," too! James A. Carmichael.

2016 Arch Street,
Philadelphia, Sept. 16, 1896.

My Dear Doctor: In your September number, page 277, you speak of opium poisoning and pons apoplexy. May I suggest that in a following article you mention as symptoms favoring apoplexy into the pons:

First few hours, when doubt alone possible, the temperature is below normal.

Involuntary discharges from bowels and bladder.

Face pale as a rule.

Often not accompanied by loss of unconsciousness. *Vide* Oppenheim, page 499.

Perspiration either absent or by no means as extraordinary as in toxic. *ex usu opii.*

Cheyne-Stokes most frequent form of breathing.

Pupil not contracted at maximum.

To be sure, as soon as a few hours have passed no difficulty exists. Finally, in very few cases of this form of apoplexy are convulsions absent, and thus the diagnosis becomes easier still.

Cordially yours,
HUGO ENGEL.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

Passage of Microbes Through the Placenta.—It has been the accepted opinion that microbes never penetrate the placenta, and consequently that the mother could never directly infect the fœtus. To-day the passage of microbes cannot be disputed, and this fact has been demonstrated beyond question by numerous experimenters. M. Chamberlin, of Bordeaux, injected pregnant rabbits with the microbes of chicken cholera, which he unmistakably found in the blood of the fœtus. MM. Strauss and Chamberlin proved the transit of microbes through the placenta in their experiments upon the bacteria of charbon. M. Netter also demonstrated the passage of the pneumococcus through the placenta of the guinea pig. He also proved, by culture, the presence of the pneumococcus in the blood of the fœtus of a pregnant woman dead of pneumonia. As regards the passage of Koch's bacillus through the placenta, opinions are divided. The experiments of MM. Landouzy, Martin, Bar and Renou have produced positive results. MM. Sanchez, Toledo, Vignal and Chamberlin have never succeeded in demonstrating the presence of the bacillus in the fœtus of tuberculous women. The transit of this bacillus through the placenta is an undeniable fact, but it very seldom occurs, and is, in effect, a pathological rarity. The transmission of the streptococcus, staphylococcus and bacterium coli through the placenta has been demonstrated by MM. Chamberlin and Sabrazes.

Diagnosis and Treatment of Tic Douloureux of the Face and of Migraine.—"Hopital Cochin," Dr. Gilles de la Tourette: Facial neuralgia, or rather, tic douloureux of the face, is nothing more than neuralgia of the tri-facial nerve. This nerve springs from two roots—one motor, the other sensitive, the latter the seat of the tic douloureux. The painful points correspond to the points of peripheric emergence of each of the three sensory branches. The ophthalmic branch of Willis has three points, supra-orbital, palpetral and nasal. The superior maxillary has the infra-orbital, molar, dental and the palatine joint of Meglin; and lastly, the interior maxillary division presents the temporo-maxillary, inferior dental, lingual and mental branches. Tic douloureux causes the most atrocious suffering, occurring most frequently by attacks of extreme intensity. The treatment of choice proposed by Trousseau and Charcot is opium in large doses. In migraine the bromide of potassium, or rather the three associated bromides in progressive doses, increasing and decreasing, often succeed.

Treatment of Pneumonia by Digitalis in Large Doses.—Hopital Broussais, Dr. Barth: Traube was the first to observe the efficiency of the treatment of pneumonia by digitalis. Stirtz recommended its use. Petresen, Fikl and Hoepfel have also successfully treated numerous cases of grave pneumonia by this remedy. The fever usually terminates gradually, rather than by sudden apyrexia, and convalescence is rapid. Recourse should be had to the digitalic treatment, in all cases of grave pneumonia, in which bathing is contra-indicated, especially in old and aged patients, whose circulation is feeble. It should be prescribed as follows: 1 grm., 50 centigrm. to 3 grm. of the powdered leaves in infusion, with 100 grms. of water, 25 of rum, and an equal quantity of syrup of orange peel, teaspoonful doses every two hours. Neither vomiting nor vertigo should cause alarm. Suspend the remedy only if the pulse should become enfeebled or irregular. Continue until subsidence of fever. Thanks to this method, patients recover without complication, who would otherwise certainly have succumbed to the disease.

ACADEMY OF MEDICINE.

The Plague and Anti-Plague Serum.—M. H. Monod: The French Consul at Canton confirmed the dispatches which he had addressed to the Minister of Foreign Affairs, in which he announced that Dr. Yersin had inoculated a Chinaman gravely afflicted with the plague with the antiseptic serum, and with absolute success. In this patient Dr. Yersin made three injections of the anti-plague serum, the first at 5 o'clock, the other two at 6 and 9 of the evening. Immediately after the injection the patient vomited alimentary and bilious matter, frequent symptoms in cases of plague. At 6 in the evening the general condition seemed improved. At 7:30 fever increased, with excitability, colic and slight diarrhœa. At 9 fever, very high, with wandering delirium and restless sleep. Punctures painful, notable amelioration, patient recovers consciousness, says he feels better, calm sleep subsequently. General improvement manifest, no more vertigo, less debility, fever abated, swellings less painful and diminished in volume. Patient pronounces himself cured, skin moist, fever disappeared, only trace of disease consists of two swellings the size of a bean; punctures still painful. Two days after all induration gone, patient recovered appetite and strength, and three days after the injection he could walk without much fatigue.

A Case of Spina Bifida.—M. Berger read a report of a case of this affection, which was addressed by M. Kirmisson. A child, three months old, had in the lumbar region a spina bifida, 3 centimetres in height, and 5 in breadth, pediculated and irreducible. M. Kirmisson diagnosed spinal meningocele and operated upon it with full success. The coverings of the tumor had the appearance of myomatous tissue. M. Berger observed that the analogy was purely external. They were composed of conjunctive tissue, the lamellæ of which were infiltrated with serum, and not of veritable myxoma, a fact otherwise common. On the other hand, on making a minute anatomical investigation of the tumor, M. Küss found that section at the top of the pedicle revealed a spherical protrusion of medullary tissue, adherent to the coverings of the tumor by a vascular layer, in which it was easy to recognize the pia mater. This protuberance of medullary tissue manifestly belonged to the posterior cords, which demonstrated the absence of paralysis caused by the section, and the presence in the portion excised of a posterior rachidian branch, with its accompanying ganglion. The center of the medullar tissue presented a prolongation of the canal of the ependyma, which was continuous with the cyst contained in the tumor by a cord formed of ependymal cells that were easily recognized. The cyst itself presented a covering of cylindrical cells, indicating by their form and their disposition that this cavity was nothing more than a diverticulum from the central canal of the medulla. On discussing the anatomical nature of this fact, M. Berger refuses to see in it an example of myelocele properly called, and, in despite of its unusual characteristics, he classes it among the myelocystoceles. According to him, it consists of a cystic dilatation of the canal of the ependyma, which has become enucleated from the posterior cords and separated from the central canal of the medulla by the obliteration of its pedicle. This observation proves that the diagnosis of different varieties of spina bifida is often impossible, and it cannot be affirmed with certainty in many cases that we have to deal with a veritable meningocele.

FRENCH CONGRESS OF INTERNAL MEDICINE.

Pathogenesis of Intra-Vascular Sanguineous Coagulations.—M. Mayet: In pathological conditions the great cause of intra-vascular coagulations is the alteration of the walls of the vessels by microbes. In a certain number of cases the histo-chemical alteration of the blood (the increase of its coagulability) plays a preponderating part. The local conditions of stasis also have their importance, and explain the formation of thromboses in the lower limbs, in which the veins are not supported by the aponeurotic layers, as in the neck. Vascular thromboses may be designated as follows: 1. Coagulations caused by vascular alterations of the veins from external causes, viz., wounds, contusions, mechanical compression, or by tumors. 2. Coagulations caused primarily by vascular alterations produced by some internal local pathological process without alteration of the sanguineous crassamentum, viz., varices, aneurism, atheroma, non-infectious phlebitis. 3. Coagulations due to hypoglobulin, to modifications of the blood which accompany it, and which act by interfering with the nutrition of the vascular walls without any infectious influence, such as chlorosis. 4. Coagulations, in which primitive alteration of the blood plays the principal role, aided by some local conditions of imperfect circulation. 5. Infectious coagulation, phlegmasia, puerperal fever, etc. According to M. Vasquez, among the causes of coagulation in the vessels may be enumerated: (*a*) The role of mechanical conditions; (*b*) that of blood alterations; (*c*) that of alterations of the vascular parietes. The complete arrest of the blood does not produce intra-vascular coagulation so long as this general mechanical condition acts alone, or even operates in septic surroundings. Coagulation of the blood in the vessels is produced the more easily the slower the sanguineous current. If the vessel be previously altered by some impeding or infectious cause, we observe the leucocytes and sanguineous plates attach themselves to the coats that are thus altered and a thrombus appears at this point. The blood does not possess in all similar kinds a similar degree of coagulability, and this degree may vary in subjects of the same species. Every alteration of the internal membrane of vessels is not *ipso facto* followed by the formation of a fibrinous thrombus. Coagulation resulting from such conditions is due to the vascular lesion, and there is persistent coagulation only when there is persistent alteration of the vascular parietes. As respects the anatomical evolution of coagulations, one fact is admitted by all authors, and it is the special power possessed by the elementary granulations (the hematoblasts of Hayem) to coagulate the fibrine. These impress this power upon the nucleo-protoplastic substances derived from the white globules of the blood. These granulations accumulate upon the altered vascular parietes, and in this way their chemical action of fermentation exercises itself by precipitating the fibrine of the blood.

Chloroformic Syncope: Section of the Internal Jugular Vein: Cure.—Drs. Waterhouse and Gibbs report the following interesting case:

A young man, aged seventeen, presented himself for removal of large tuberculous glands of the neck. The patient's heart and lungs were in a perfect condition of health; chloroform was the anæsthetic selected, as the region to be operated upon was near the face, and there were vegatations in the pharynx. The operation proceeded well for the first forty minures. In order to remove the deep seated glands, it was necessary to expose the carotid artery and the internal jugular vein, and to divide a collateral vein from this trunk. At the moment when the diseased glands were removed, the respiration and pulse having been excellent, the patient was seized with violent efforts of vomiting. Skinner's mask was recharged with chloroform and reapplied to the face for thirty seconds, when suddenly the patient became deadly pale, with lips cyanosed, pupils dilated to their maximum, pulse ceased, then respiration after three slight respirating efforts. The mouth was immediately opened, tongue drawn out, head depressed, and artificial respiration vigorously practiced, and every means used to relieve the distended right side of the heart.

For three minutes there was no cardiac response, and the patient was considered to be dead. The internal jugular vein was then opened, and the thorax compressed from below upward, and on the left to relieve the distension of the right heart. A copious flow of black blood followed the opening of the jugular artificial respiration was renewed, and after two or three feeble efforts at voluntary respiration the heart responded, consciousness returned, and life was saved. The process so happily employed in this desperate case opens a new method to be used in such extreme instances of impending death. The opening of a large vein near the heart, by relieving its congestion, must exercise an energetic action and restore its contractions.

The Cause of Death in Explosions in Mines.—The report made by Dr. John Haldane, Professor of Physiology of the University of Oxford, upon the causes of death of miners in explosions, and given by request of the English Secretary of State, contains many valuable suggestions.

He also proves that the new methods of ventilation of the galleries have caused the disappearance of phthisis, which has been so common heretofore, from among the miners. When the ventilation is too rapid, the air in contact with the subterranean currents becomes overheated, and carries along with it carbon, very dry and in the form of very fine dust, which ignites very readily and explodes like powder, and by the explosions the oxide of carbon is evolved in large quantities. Thus does Dr. Haldane prove that the majority of deaths of miners is produced, not by shock nor burning, but by poisoning by the oxides of carbon, as can readily be recognized by an examination of the blood. Hence he recommends that mice in cages shall be placed in the galleries, because they are very sensitive to this poison, and would serve to warn the miners of the presence of the dangerous gas, and thus enable them to escape in time. On the other hand, since it is the oxide of carbon which is destructive to life in explosions, and not the shock itself, and life may be restored a long time after the loss of consciousness, fresh air should be admitted into the galleries, or fresh oxygen, as speedily as possible.

Of the Position of the Body After Delivery.—Dr. Jelps affirms that the rest in bed for ten days after delivery is not always advisable; indeed, is often harmful, because the horizontal position favors retro-displacements, especially after rupture of the perineum. Parvin and Goodsall, if the patient be strong, recommend that the stools should be passed in the sitting position, and after three or four days she should recline upon a sofa, warmly clad. The vertical position facilitates drainage, and if the patient should not walk nor make any exertion there will be no fear of uterine displacements. Of course, this treatment naturally presupposes that the delivery has been normal, and exempt from complications.

A Psychic Deaf-Mute.—A boy of six years, a deaf-mute, presented himself at the clinic of Prof. Gruber, St. Petersburg. His parents, brothers and sisters were all deaf-mutes. After a critical examination, it was decided that the child was not a deaf-mute at all, that it was only a habit maintained by the influence of his surroundings. Living constantly among deaf-mutes, he had no opportunity to develop sufficiently either speech or hearing. When separated from his family, and placed in a normal condition, he began at the end of two months to speak imperfectly. Prof. Gruber called this a case of psychic mutism.

Tamponning the Uterine Cervix for Uncontrollable Vomiting of Pregnancy.—The case was that of a woman who had uncontrollable vomiting during her first pregnancy. The same returned at her second pregnancy. Abortion was decided upon, and as the cervix was hard and contracted, a tampon of iodoform gauze was introduced into it. It sufficed to suspend the vomiting, and two other attacks during her pregnancy were arrested by the same means. The vomiting may be attributed to the hardness and narrowness of the uterine neck, a probable point of departure for reflex irritation which excited the irritability of the stomach.

THIRD FRENCH CONGRESS OF MEDICINE.

MM. Bouchard and Mayet, Presidents.

The Congress of Medicine of Nancy began its work on Tuesday, August 6th, in the great amphitheatre of the Anatomical Institute. President Bouchard called upon M. Roger, who read a report upon the applications of sanguineous serum in the treatment of diseases. M.

Roger, History: Serotherapy, like all other scientific methods, had its advocates in the past, who contributed really nothing to those who made its veritable discovery. Maurice Raynaud, and afterwards Chauveau, made experiments upon the influence of the serum of vaccinated animals upon the evolution of vaccine. In 1884 Rondeau treated sheep that were inoculated with charbon by injections of the blood of the dog. But the real inauguration of the sero-therapic method dates from the experiments of MM. Richet and Hericourt in 1888. These experimenters discovered that the blood of the dog cured of an inoculation of a microbe—staphylococcus pyosepticus—could save other animals infected by the same microbe. Babe and Lapp made analogous observations in hydrophobia. Bouchard established that the serum replaced the blood in inoculations of this kind, 1890. These experiments were guided by previous works of Grohman and Fodor, who in 1884 and 1887 had proved the bactericidal properties of defibrinated blood. Flügge, Nüttal and Nissen renewed these researches, and Behring and Büchner—1888–89—applied them to serum. Metchnikoff, Gamaleia and Nüttal proved that previous vaccinations developed the bactericidal properties of the serum. A new grand discovery of Berhring and Kitasato demonstrated that the serum of inoculated animals had not only bactericidal properties, but that it destroyed the toxine of microbes. This grand discovery applied to diphtheria and tetanus, had not had sufficient practical applications, and the therapeutic results were conflicting, when the work of Roux and Martin put the action of serum beyond a doubt, followed by the statistics of Chaillon in its application to the diseases of children. The enthusiasm of this discovery was unheeded, and serotherapy gave place to other hasty and incomplete ideas. Discord succeeded, which assisted in bringing matters to a point, and which will enable us to use with every possible benefit the new therapeutic method, which in taking a prominent place, does not nevertheless supplant other processes.

General Principles of Serotheraphy.—Serotheraphy rests upon the action of products developed in the blood under the influence of bacterial toxines. The inoculation of these toxines confers immunity, but the toxines eliminate themselves in a few days, and their direct employment is dangerous. For this reason it is, that now the innoculation of toxine or bacteriotherapy has given place to serotheraphy, bacteriotheraphy gives place to a *passive immunity*. The organism being impregnated by the poison, serotheraphy creates an active immunity which relieves it,

Different Applications of Serotherapy.—Serotherapy is utilized in diseases whose pathogenic microbe is known, in infections in which it is not known, in special diseases of animals, with microbes known or unknown, and in different forms of poisoning. J. A. C.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Hamamelis for Burns.—Dr. H. H. Chase, in *British Journal*, tells of a satisfsctory experience with the fluid extract of witch hazel in the raw surfaces left by burns. He applied pledgets of cotton dipped in the extract. He says there appeared to be sufficient astringency to do away with the fungosities, and some portion of the hamamelis dried into the ulcer. Normal granulations immediately formed underneath, and as these became firm and substantial the hamamelis came off, leaving a good, firm, new skin, which rapidly grew in area and thickness. The entire dorsum of a hand that was burned was completely covered in the course of ten days.

Kerosene in Surgery.—A. Shirman (*N. Y. Med. Jour.*, XLII., p. 720) has observed that in treating wounds and ulcers of the trunk and of the limbs, among the poorer classes, by the usual antiseptic methods, recovery usually progresses very slowly on account of the fact that time and circumstances do not allow the patient to apply these preparations as often as necessary.

For this reason the author determined to try some other substance as an antiseptic, and it occurred to him to experiment with kerosene in these cases.

For this purpose, in cases of ulcers, especially atonic and indolent ones, he smeared them with commercial kerosene, either pure or diluted with from 33 to 50 per cent. of alcohol, by means of a small camel's hair brush or a piece of gauze soaked in the solution. Shortly after the application a burning sensation was felt, but it soon passed away.

The appearance and character of the ulcers showed a change for the better. The discharge gradually diminished, and in the course of from two to four weeks the rapidly granulating surface formed a scar without any contraction of the surrounding parts.

The advantages of the use of kerosene for such cases, Dr. S. summarizes as follows: It produces healing in a comparatively brief space of time; it is much more economical and is easily obtained; it does not produce constitutional poisoning through the wound by absorption, as other antiseptics sometimes do; it has not the intolerable smell of some of the others which are now in use; and the formation of a cicatrix on the ulcers proceeds rapidly. The author has never found the wound to be complicated with any erysipelatous process. Kerosene, having a local irritating action on the wound, undoubtedly possesses also disinfecting properties for the remote surface as well as for the adjacent surface around the wound. This is of great value, for actual facts show that persons residing in the kerosene oil districts are protected against ailments of an epidemic character—such as cholera, etc.

Menthol-Chloroform for Colds.—Wunsche, in *Therapeutische Monatshefte* (*Med. Age*) says that menthol, dissolved in chloroform, is the most efficacious of all remedies. A solution of one or two parts of menthol in twenty parts of chloroform will not only arrest the progress of a cold in its initial stage, but is also an excellent influenza prophylactic. From four to six drops of the solution should be placed in the hollow of the hand, quickly rubbed between the hands, the two hands tightly pressed together placed before the face, and the remedy energetically inhaled alternately through the nose and the mouth. It will be immediately noticed that the volatile parts of the solution thoroughly impregnate the mucous membranes of the nose, mouth and throat, and even penetrate deep down into the air passages. During the first two or three inhalations the sweetish chloroform vapor predominates. Afterward, however, only menthol in attenuated condition is inhaled, odor and feeling remaining apparent for some time after the inhalation. As a rule, the first inhalation suffices to cure the severest tendency to sneezing, and often to arrest the progress of the cold altogether. Two further applications of the remedy in the course of the day suffice to suppress the attack completely. The first inhalation at first slightly increases the flow from the mucous membrane of the nose; afterward, however, this symptom diminishes quickly. Pains in the pharynx and larynx may be quickly eased and often entirely relieved by the remedy.

Sugar or Honey in the Treatment of Scorpion Stings.—Dr. E. Lerede Chalke says in the *Indian Medical Record* (*Drugg. Circ.*) that he has had hundreds of cases of scorpion stings to deal with, and has tried various remedies to relieve the stinging pain and burning sensation which invariably are the chief symptoms for which relief is sought, and he finds that the application of honey to the affected parts acts the best, producing almost instant relief. The stinging and burning sensations vary in degree according to the species of the scorpion which causes the sting. He recalls the case of a delicate middle-aged woman who was suffering from heart disease, and was stung by one of the black kind, a huge monster with formidable claws and a big sting. The woman was carried to his bungalow in great agony, cold and clammy, and begged him to relieve her of the intense pain, which she said she could bear no longer. There was a large gathering in his place at the time, including two of the profession. He immediately brought the honey, which he applied gently but freely over the affected part. The relief was almost instantaneous, to the astonishment of the patient and the spectators, particularly the physicians. This, he says, was one of several cases he has treated with honey, and he has always found it a very reliable and prompt medicament. If honey is not procurable at the time, a strong solution of sugar in water will be found a very effective and equally good substitute. He has also tried over-ripe plantains squeezed and applied as a poultice over the affected part, and found them to give speedy relief.

Scullcap in the Treatment of Nervous Affections.—Under the title of "A Country Doctor," a contributor to the *Journal of Medicine and Science*, Vol. II., No. 1 (*N. Y. State Med. Reporter*), recommends the use of scullcap (*scutellaria laterifolia*) in the treatment of nervous diseases, particularly those of women. The author claims that it is a true nervine, somewhat anti-spasmodic, partly analogous to valerian in its action, yet differing in many respects.

Scullcap is a nervous sedative pure and simple—a wet cloth upon a fiery brain—and in many instances it is morphine, sulphonal, bromide and chloral all in one. It creates no habit, and is apparently harmless. It is of little use to relieve severe pain. In the treatment of delirium tremens scullcap is invaluable, and has the remarkable effect of *calming fear*. When brain disease exists or is to be feared, or in insanity, the author sometimes gives it with cannabis indica.

When possible to obtain it, the author uses the fresh herb, gathering it in the woods and meadows, from which he makes a decoction, giving from one-half to a drachm in very hot water an hour or two before bed time, and repeating once or twice, with an hour interval, if necessary. In chronic cases it may be given frequently during the day. When the herb cannot be obtained the author uses green fluid extract only.

Influence of Carbonic Acid on the Sexual Organs.—At a recent meeting of the German Society of Balneology, (*Gaz. Hebdom. De Med. et De Chir.*, April 16, 1896), Dr. Schuster remarked that irritation of the skin produced by bathing in water containing carbonic acid was manifested by a sensation of heat and prickling, with redness, especially pronounced in the region of the genitals. This irritation, he said, was propagated centripetally, and gave rise to modifications in the nervous and vascular systems. As the sexual centers were not very deeply situated, the excitation readily reached both to the medullary center (that of erection and ejaculation), and to the cerebellar center (that of imagination). The medicinal use of carbonic acid was indicated, therefore, in all cases of sexual debility not dependent on some organic disease, such as tabes, nephritis, or diabetes; it was directly contraindicated in spermatorrhœa and in the grave forms of paralytic impotence, but it might be of great service in precocious senile impotence. The use of carbonic acid in the form of baths, douches, etc., was indicated also in the anaphrodisia of women. It was of substantial benefit, too, in utero-ovarian neuralgia, in dysmenorrhœa and in amenorrhœa.

Gossypium Herbaceum as an Hemostatic.—Poteenko (*Vratsch*) recommends the fluid extract of gossypium herbacum as an excellent hemostatic. Dr. Narkevitsch uses this remedy for uterine hemorrhages. It is employed internally, 20 or 30 minims three or four times a day during four or more days, and not over ten days. Its action takes place after the first or second administration, and there is where the usual hemostatic remedies are not successful. He used it since 1890, in fifty-nine cases, among which were thirty cases of disease of the female organs, twenty-one cases of hemoptysis, six cases of epistaxis, and a case each of rectal hemorrhage and blood vomiting. In all these there was no trouble with the digestion, but, on the contrary, an improvement of the appetite, and hence he concludes that it is a safe remedy. During the pregnancy it has a very good influence, and it is not necessary to give more than thirty drops at once.

Hot Baths in Chlorosis.—An authority upon the subject (as quoted in the *Am. Jour of Surg and Gynec.*) says: The primary affection in chlorosis is not the deficiency of iron or red corpuscles, but contraction of the blood vessels, which is followed by the morbid condition of the skin; he was led to employ hot baths and gentle friction of the skin to increase its vitality and nutrition. His success was marked. Hot baths diminish the plethora by relaxing the tension of the vascular system, which is high, quickening the circulation, and thus relieving the palpitation, dyspnœa and other symptoms.

Hydrochlorate of Phenocoll for Pertussis.—Martinez Vurgas (*Med. Mod.*, 1896) obtained the best results in pertussis with phenocoll hydrochlorate. He gave it in solution (strength not stated) to forty-two cases, the daily dose being one to two grammes (gr. xv-xxx). In about twelve hours a diminution of the number of coughing fits and a lessening of their intensity were noticed. If the administration is not interrupted the amelioration continues. The drug is well supported by the patients, and succeeds even in cases complicated with pleuro-pneumonia.

Mullein Oil for Enuresis.—Dr. O. S. Laws states, in the *Cal. Med. Journal*: That for enuresis he has found mullein oil, so far, a specific. He places it at the head of the list for that condition, both as to certainty and pleasantness. One of his cases was that of a boy aged sixteen, who from childhood had been troubled with enuresis which nothing would cure until he received fifteen drops of mullein oil three times a day, which soon permanently removed the complaint.

Senecio Aureus in Ascites.—Dr. C. M. Foss, of Dexter, Me., reports in *Trans. Hom. Med. Soc.*, 1895, that Della L., eighteen, had no menses for fifteen months; chlorotic; dry, hacking cough, quick pulse, increasing on excitement to 120 and over; headache, poor sleep, constipation, abdomen gradually enlarging for the past year; can sit up about one-half the time. After attending her for six months he called counsel, who decided that drawing off the fluid was the only chance. She was now as large as a woman at full term. He gave senecio aureus, ix dil., with rapid improvement of all the symptoms. She had no other remedy until cured. It has been over fifteen years and she remains well. The menses returned within a short time.

Hot Compresses for Ulcers.—*Nouveaux Rémedes* quotes a Russian periodical in which Yakovlef announces his successful treatment of antonic ulcers with moist hot compresses during the last three years. They will, according to Yakovlef, cure where all other kinds of treatment have been ineffectual. He ascribes their success to their favoring local hyperæmia, thus improving nutrition, while being moist they do not adhere or irritate.

Sodium Chloride in the Nasal Cavity.—Dr. Capp recommends the insufflation, through an ordinary insufflator or other appropriate tube, of from 2 to 4 grains of pulverized table salt, as a measure tending to give immediate relief in facial pain or headaches arising from trifacial irritation from decayed teeth, eye strain, or other causes, such as ear affections, hysteria, or uterine reflexes. The measure was first applied, according to the author, by Leslie, and published in the *Edinburgh Medical Journal*, January, 1890. The latter had successfully employed it in the treatment of obstinate and long standing cases, as well as in acute neuralgia, headache, faceache, earache, toothache, and bronchial asthma. The application causes about the same temporary discomfort as would a pinch of snuff, but is not followed by bad results, and is usually successful.

RETROSPECTIVE DIETETICS.

Diet in Nervous and Mental Disease.—Dr. Frederick Peterson, in a paper on some of the newer methods of treatment in nervous and mental disease (*Am. Med. Surg. Bull.*, June 6, 1896), remarks as follows: It is needless to say that in connection with a form of rest treatment, simplicity should be the rule as regards food. The selection should be made from the point of view of easy digestibility, and foremost in this regard stands milk in its various preparations. Where milk cannot be taken in its ordinary form, some more digestible preparation may be employed, such as peptonized milk, kumyss, matzoon, or somal. In cases undergoing a rest treatment this is the main staple of food, and it should be given frequently and in considerable quantity. Overfeeding is indeed another principle in the treatment of any of the nervous and mental diseases in which exhaustion is a feature. Thus, absolute rest and overfeeding must be our chief reliance in acute mania, in severe types of melancholia, neurasthenia, hysteria, chorea, and the like. Many cases require feeding every hour or two hours. Raw or soft boiled eggs, rare or raw beef, specially prepared cereals, and sometimes green vegetables and fruits may be added to the diet. By specially prepared cereals I mean simple boiled rice, stale bread in the form of toast, or better, bread which has been twice baked (swieback). Stimulants are only occasionally needed, and then especially in acute maniacal or other dangerously exhausting condiditions.

A somewhat similar form of diet is appropriate for neuralgia and mental disturbances having a rheumatic or gouty diathesis as a basis. The same diet is essential in all cases of insanity, neurasthenia, epilepsy, and so on, which seem to depend upon auto-intoxication from fermentative or putrefactive changes in the intestinal contents, and such cases we find nowadays to be not at all infrequent.

Milk in the Treatment of Bright's Disease.—The Charlotte *Medical Journal* (*Am. Med. Rev.*) credits Dr. Sapelier as saying: Milk is both the food and the remedy *par excellence* for Bright's disease. During the acute or subacute stage of the disease it should be used exclusive of all other articles of diet. During the entire course of the disease milk should constitute the chief liquid food. We need not here recall the fact that milk is a complete food, neither need attention be called to its chemical composition. It is only necessary to remark that three litres of milk are sufficient to nourish a man completely, even when engaged in light work. * * * In the majority of cases we may prescribe, at the beginning of treatment, two litres of milk, adding an additional litre when the patient feels in need of it.

Milk may be taken boiled or unboiled, hot or cold, according to the convenience and taste of the patient. Raw milk is generally better digested than boiled milk. Milk should be taken regularly every two hours, in the proportion of six to ten ounces or more, according as the total quantity in twenty-four hours is to be two or three litres.

The dose of milk should be taken slowly, in small swallows, so that the clots formed in the stomach may be as small as possible. For cow's milk, which is generally employed, we may, as required in individual cases, substitute, in whole or in part, the milk of the goat or the ass, also kephir or kumiss. If the taste of milk is very repugnant to the patient, it may be flavored with orange water or some other agreeable flavor. It is unnecessary to employ for this purpose brandy or other alcoholic liquors.

All the efforts of the physician should be directed to making the patient and his friends understand that milk is the essential basis of the treatment. Without milk there is no prospect of health, and, as we have been obliged to say, sometimes it is "milk or death."

Cooking and Dietetics.—Dr. E. B. Borland, in an address before the nurses of the West Penn. Hospital Training School (*Dietetic and Hygienic Gazette*, June, 1896), recapitulates as follows:

First: The cooking of starch. Remember that it takes a temperature between 300° and 400° to convert starch into dextrin. Boiling does not accomplish the cooking of starch. Second: Never buy cooked or prepared food. This invades the province of the cook. You are never able to judge of the freshness of prepared food. I consider it one of the greatest mistakes of the present age to allow food to be brought to the table which may have been prepared a thousand miles away, and perhaps anywhere from three months to fifteen years before it is placed on the table, and when it reaches it may be a mass of germ life, and as dangerous to eat as many of the drugs which we call poisons. Food can be best prepared in the kitchen by the cook immediately before its consumption.

In cooking meats, they should be exposed to the highest temperature at the very start. If you are preparing a roast, sear it over on the skillet before placing it in the oven, thus making a coating to keep in the juices. Then a low temperature of 180° to 200° Fahr. until tender.

The test for the digestibility of the common articles of food: Articles which are digestible become soaked with water within a minute after immersion, and any article, except meats, which will not readily soak up the water may be considered as not easily digestible. Among these articles may be mentioned the gelatine preparations, pickles, fried foods, dumplings, as they are ordinarily prepared, short pie crusts and noodles. If these, or other similar articles, cannot become soaked with water in a short time, how can we expect them to become soaked with the digestive juices in the stomach of a sick person? It is important that we give the sick food that can be promptly penetrated by the digestive fluids.

In conclusion, I wish to say that cooking is an accomplishment. It is noble, because it is useful. Good cooking causes more happiness and poor cooking more unhappiness than perhaps any subject we could discuss here this evening. If training in these particulars were more rigid before marriage there would be less domestic infelicity after marriage. The women of the world who have achieved success are women who have been taught to cook while yet in their teens, and to cook well.

The woman in her home, under ordinary circumstances, who places food before her guests which was entirely prepared or cooked outside of her kitchen, shows those guests a positive discourtesy. They leave her table with the impression that she is either grossly ignorant of the essential of every woman's education or too indolent to put her knowledge into practice.

A woman should not take upon herself the duties of a wife until she is at least able to personally oversee the preparation of the food of her family. I might go still further and say that the civilization and progress of a nation depend primarily on two factors—the purity of its religion and the proper preparation of its food. Verily, the hand that prepares the nation's food is the hand that moves the world.

Bacteriology of Butter.—The farmers of Denmark have taken advantage of the developments of modern bacteriology in the manufacture of butter, says *Modern Medicine*. The Danish bacteriologists having determined the particular microbes by which the various flavors are developed in butter, the farmer is now able, by sterilizing his milk, and then planting that particular species of microbe by which the desired flavor is produced, to furnish a uniform quality of butter of any desired flavor. The dairymen of Denmark have by this means succeeded in obtaining almost complete control of the English market.

OBITUARY.

THE HON. WILLIAM L. BOSTWICK, one of the Senior Regents of the New York State University, died at his residence in Ithaca, September 22d, of paralysis, at the age of fifty-nine years. Mr. Bostwick was stricken with the disease which terminated his life while cashier of the New York Custom House, to which office he was appointed by Collector Erhardt during Harrison's administration, and was continued in his position during Cleveland's administration, until compelled to resign on account of ill health. No one now living has left a stronger, more enduring impress for good upon the educational interests of the State than Regent Bostwick. A thoroughly trained scholar, a clear thinker, of an eminently logical and practical mind, as State Senator, as Regent and as private citizen, his influence and his great personal magnetism were always on the side of justice and progress. No man can rear a nobler, prouder monument than he rears for himself in an earnest, unselfish life. The good he has accomplished lives after him and gives fragrance to his memory.

MISCELLANY.

—Sir John Millais, President of the Royal Academy, died of epitheloma of the larynx.

—Repeated small rectal injections, it is said, will relieve the intense thirst following abdominal operations.

—Nitrate of silver stains can be removed from the skin by painting with iodine, and after a time applying ammonia.

—London now has a periodical with the title *Archives of Skiagraphy*, devoted to the uses of the Roentgen rays in medicine.

—Cohn says a single germ could, under good conditions, multiply in three days to 4,772 billions, and make a mass weighing 7,500 tons.

—The English vaccination report was seven years in preparation, and recommends the abrogation of the law making vaccination obligatory.

—A Swiss scientist has been testing the presence of bacteria in the mountain air, and finds that not a single microbe exists above an altitude of 2,000 feet.

—A prize of $20 is hereafter to be offered semi-annually to the surgical interne of the Boston City Hospital who administers ether in the most skillful and humane manner.

—A pocket telephone for policemen has recently been introduced. There is a combined mouth and ear piece, with about a foot of wire, which can be attached to any fire alarm.

—No one expedient will add more to the comfort of your patients suffering from rheumatism than the application of cold to the affected part. Don't be afraid to use it early and well.

—A hospital car has been placed on the Plant railroad system under the direction of its chief surgeon. Whenever there is an accident on the road this car is immediately dispatched.

—*Corns*. Cover the corn night and morning with collodion to half an ounce of which has been incorporated salicylic acid, gr. xxx., can iod. gr. x. The corn will come away in a few days.

—Dr. V. C. Vaughan, Dean of the Medical Department of the University of Michigan, has declined to leave that institution upon a flattering offer made by a New York college, said to be Bellevue.

—The preventive value of pure water is shown by the fact that London, with its more than 4,000,000 inhabitants, has a less number of deaths from typhoid fever than Philadelphia, with its 1,000,000.

—Half a wineglassful of sea water, taken as soon as the motion of the ship becomes unpleasant, is said to actually prevent sea-sickness in persons who are most susceptible under ordinary conditions to its influence.

—A certain nervous condition, said to result from excessive use of the bicycle, has been termed the "vibratory habit." Sir Benjamin Ward Richardson has presented the subject before the Medical Society of London.

—In cases of ingrowing toe-nail an attempt should first be made to save the nail. Remove all of the redundant hypertrophied and granular tissues of the skin, apply nitrate of silver freely to the exposed surface, and leave the nail alone.

—According to the *Medical Record*, several of the accident insurance companies have recently raised the premium rate for physicians, upon the ground that they do not belong to the preferred class, being really extra hazardous risks.

—Medical women are now admitted to practice in Austria under conditions requiring not only a high professional education, but also a blameless moral conduct. Their services are in demand for the care of Mohammedan women, who have heretofore been without medical attention.

—Prof. Ramsay has made public a very unlooked-for result, apparently due to the Roentgen rays. A friend of his who had freely exhibited the bones of one of his hands by exposure to the rays subsequently "shed" all the finger nails of that hand.

—The Library of the Surgeon-General's office at Washington, D. C., now contains 116,847 volumes and 191,598 pamphlets, and is believed to be the most complete medical library in the world. From 1867 to 1895 Congress has authorized an expenditure that averages $7,000 per annum for its maintenance.

—Dr. George M. Kellogg argues that infants should be trained from birth to use either hand, as right-handedness is not natural but entirely acquired. This use of both hands, he believes, will result in added brain development. One-sidedness of the brain or of the body is not natural. He thinks this reform would do away with much brain disease.

—According to the *Medical Press*, at the trial of an action for damages at Nancy, in France, the surgeon who had charge of the injured plaintiff was accused of having caused the damage by mistaking a dislocation for a fracture. The accusation was sustained by producing in court a Roentgen photograph, which showed clearly the bones in the dislocated position without any fracture.

—When, as in an amputation at or near the ankle joint, a rubber tourniquet is applied to the thigh, Wyeth advises that care should be taken to use a wide rubber band, and not a rubber tube, since the accumulative pressure of the rubber tubing is sometimes great enough to injure the nerve. In high amputations, near the shoulder or hip, this objection does not prevail, since pressure on a nerve is immaterial at that point.

—According to *Popular Science News*, Prof. Hallock announces the discovery of a method of photographing the human voice or making intelligent pictures of musical sounds by means of the camera. Such perfect results are obtained that the voice of a tenor or soprano can be judged, he claims, with absolute accuracy as to its quality and range without hearing it, merely by inspecting a series of photographs.

—Edwin Lord Weeks in "From the Black Sea Through Persia and India," states: "Whenever a medical officer reported the condition of his men just returned from active service in Burman or elsewhere, it appeared that the best soldiers, morally and physically, those who were always exempt from such maladies as dysentery, fever, cholera and rheumatism, were the opium eaters. They were able to go longer without food or stimulants and to do more work."

—In the report of 1895 of the new hospital for women in London is incorporated the following personal: "It may interest our supporters to learn that Miss Ellaby, M.D., Ophthalmic Surgeon to the hospital, was requested to go to India last October to operate on the Maharanee of Jamnagar for cataract. The patient was seventy years of age, and for five years had perception of light only. Both eyes were operated upon, with a month's interval between the two operations. The recovery in both cases was without complication of any kind, and the sight of both eyes was completely restored."

—One of the first successful operations for pulmonary abscess was the following: An officer in the army of Gen. Rolfe was apparently dying from an abscess on the lungs, and was in consequence absent on sick leave, when a battle was expected. He heard of it and at once rejoined his regiment, saying in reply to remonstrances that as he had been given over to die he preferred doing his duty, and if he was killed in the service of his country a few days would not matter. The battle came off and he was wounded in the breast. But the ball pierced the abscess and made an opening for the discharge of the contents, whereupon he recovered and lived to be over eighty.

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ORIGINAL ARTICLES.

THE RELATION OF PHYSICS TO PHYSIOLOGY.

BY PROF. A. E. DOLBEAR, TUFTS COLLEGE, MASS.

BEFORE there was any science men had theories and explanations of phenomena of all kinds. It was rare and sometimes hazardous for a man to say he did not know, but metaphysical antecedents were thought to be so good and oftentimes better than physical antecedents, and were generally more acceptable; but explanations of any kind require some sort of terminology, and that introduced at the outset oftentimes persists for a long time after its inappropriateness has been recognized. We say the sun rises and sets when we know it does not. We call presilurian rocks azoic, when we know some of them to be full of fossils. In physics we use the names caloric, latent heat, light, actinic rays, electric fluid, etc., each implying something which we know well enough has no existence, but among all such words there are none more widely used in both science and philosophy than the words *force* and *forces*. Science has the means at hand now of discovering the meaning of the term as used, but with the exception of a few in the van the old conception holds, and those who use them for philosophical purposes still assume them to have their old meaning, namely, agencies distinct from matter but capable of acting upon matter, moving it thus and thus and producing phenomena which matter through its own inherent properties could not produce. It is thus with gravitative force, chemical, electric, magnetic and vital force. More than twenty years ago Mach, Tait and others pointed out there was no such thing or action or condition, and that the word had better be abandoned; just as Prof. Newcomb pointed out a few years ago that there is no such thing as light, and that that word had better be abandoned, as it is manifestly improper to speak of the velocity of a something which has no existence.

When it was shown that heat was a mode of motion and had no existence apart from molecules and atoms, caloric and heat as forces active *upon* matter had no standing ground.

When it was shown that electrical phenomena have either heat, chemical or mechanical action as antecedents and that the relation was quantitative, then electric fluid and electric force, as something capable of acting upon matter, but independent of it, had no longer any reason for mention in physical science.

When it was shown that chemical action depends absolutely upon temperature, chemical force was banished from the list of forces, and for a like reason the physiologists banished vital force half a century ago. Forces of all sorts have thus been dethroned. There are no such things, and all the phenomena which were formerly supposed to be due to them are now seen to be due to the structure, mechanical properties and activities of atoms and molecules alone, and that no other activities than their own are operative among them or are needed by them.

If, therefore, one use the word force as descriptive of an agency for accomplishing any result in a mass of matter of whatever composition, one may conclude he is talking loosely, or else he uses the word to conceal his ignorance of the immediate physical antecedents of the phenomenon considered. He might as well have said it was brought about by abracadabra.

It is sometimes said that one fact incompatible with a given theory is sufficient to overthrow the theory. It may be true, but it is well to be sure of the fact. When the moons of Mars were first discovered, one of them was discovered to be revolving about the planet faster than the planet revolved upon its axis. This was hailed by some as being quite incompatible with the nebula theory, and was trumpeted by some who did not like that theory. A careful investigation into the mechanics of the case served to show that such a result was one of the contingencies of the nebula theory and so confirmed it. The objectors were silenced, but were not converted. A change in fundamental conceptions is as difficult in science as it is in religion or politics, and newly discovered truths of importance have to wait for a new generation without antagonistic preconceptions. If one must wait until every discrepant fact is explained before entertaining a theory which has a multitude of other facts in its favor, he will have no theory at all. Even the motions of the moon and the planet Mercury are not all accounted for in present astronomic science. The facts show some factor not yet reckoned with, and one is at liberty, if he wishes, to assume that some super-physical agency or force is active upon both, making them to move in anomalous ways. Astronomers do not do that, but are looking over the law of gravitation to see if it is accurately stated, and are figuring upon the effect› the assumption that the density of the sun's equatorial region is greater than the density of its polar regions. May it not be wise to do in like manner in every case? If an unexplained phenomenon is observed in any mass of matter, assume that some of the properties of matter have not been considered, rather than that some extra material forces are present and operative. Not until all is known as to what matter can do will it be safe to say what it cannot do.

Then what can matter do, relying upon its own resources, so far as is generally acknowledged? There appears to be no objection anywhere to crediting all so-called inorganic phenomena, such as gravitation, heat, electricity, and chemical reactions, to the inherent properties of the various masses of matter that exhibit the phenomena. All these agencies are called physical or chemical, and only when one attempts to account for particular phenomena does any one begin to talk about forces. Gravity is only the hold that every atom has upon every other atom, and it never relinquishes it. It is now explained as due to ether pressure, which pushes atoms towards each other, and the expression gravitative attraction is becoming obsolescent. Heat is the vibratory motions of atoms and molecules, a rapid change of form due to their elasticity. Light, now called ether waves, is the reaction upon the ether of the vibratory motions of the atoms and molecules which produce wave motions in the ether. Chemical reactions are conditioned by the rates of atomic vibrations, and these in turn by the masses of the atoms, so in the absence of heat there can be no selective property, and therefore no molecular combinations. Electrical phenomena are due to atomic rotations, and the reaction of the rotations upon the ether sets up in it stresses and waves of precisely the same nature as so-called light waves. In each of these fields of phenomena there is to be ultimately traced only matter, the ether and their mutual relations and inter-actions. If anything happens it is because physical energy, as a bump, a vibration, a rotation, or a wave, is acting upon matter. Whether one thing or another happens depends upon the mass and the kind of matter. If there be any one statement which has the whole body of physical science in its favor it is this: That no particle of matter ever changes its character or mode of operation on account of its environment. The properties of the elements are invariable. The books have long taught us that it was indestructible, but they have not emphasized the proposition that one must not expect to get out of a hundred molecules what is not in any one of them, nor that the properties of any combinations of atoms, simple or complex, are the resultant properties of the elements which compose it.

What differences are there between carbon dioxide, protoplasm, and the elements which compose them?

The properties of atoms are not alike on different sides. They are eolotropic or polarized, and when any given atom is turned round in a given compound, the resultant is changed by the configuration, not because the particular atom has assumed a new property, yet the molecule exhibits a different quality and may have a different function, and this is to be assumed of every atom in every combination. The mechanical arrangement of atoms in a molecule may vary in many ways. The size of atoms is approximately the fifty-millionth of an inch. In a molecule of three atoms like carbon dioxide they could be arranged longitudinally like coins or marbles, but there is no probability they are so arranged. If they were arranged in triangular section the combined dimensions of the three would differ but little from the dimensions of one in its greatest diameter, and however one should measure it, it would still be but about the fifty-millionth of an inch.

The molecule of protoplasm is made up of a great many atoms of carbon, hydrogen, oxygen, nitrogen and other elements. If there were a thousand, and they were arranged in a spherical form, the diameter of the mass would be not far from ten times the diameter of one atom, for the volumes of spheres are as the cube roots of their diameters, so its diameter would be the five millionth of an inch, fifty times too small to be even glimpsed with the highest microscopic power we have. The molecule of protoplasm is therefore nearly a thousand times larger than the molecule of carbon dioxide. As to the arrangement of the atoms, one cannot say with any definiteness now what it is in either, but there are some very obvious differences which one may know must be true, even if he cannot see them. By permutation we know that three numbers or things may be arranged in six different ways, four things in twenty-four ways, ten things in more than three million ways, and a thousand things more ways than can be numbered, and this is simple linear arrangement. If, in addition, there be difference of properties of the sides or faces of such atoms, then the possibilities of variety are enormously increased, practically to an infinite number, due simply to change of position of the elements giving some new characteristic to the whole so as to enable it to behave differently in its environment. In chemistry such different arrangements are called allotropic. Thus there are several such for the element carbon; diamond, graphite, lampblack, charcoal, coke, anthracite, all these are of the same ultimate element, but the properties, how different; diamond the hardest of crystals, lampblack the softest of bodies, one burning freely, the other wasting but slowly in the fierce heat of an electric furnace. The molecular arrangement in quartz is certainly of as many as three varieties, for though two crystals may look alike, one may twist ether waves to the right and the other to the left. Some crystals are so built up as to present six-sided prisms of regular symmetrical form, while others are formed of corkscrew pattern, showing a different but regular position for all the molecules that compose it. When the iodide of potassium crystallizes in the light it assumes a different form from that which crystallizes in the dark. Would not one who was acquainted with such physical facts expect to find in more complex molecules the same phenomenon of allotropy? What is allotropy? It is the assumption of different forms with different physical properties and reactions by a substance which, when analyzed, shows the same elements in the same proportion.

When there are as many atoms in a molecule as there are in protoplasm or other highly complex molecules, some of the atoms must be upon its surface and others more or less deeply imbedded. Those upon the surface are acted upon directly by such agencies as heat, cold, radiation and the like, in a way quite impossible to the deeper seated atoms, and so atomic changes could happen in one of these places at a different rate from that in the other.

There is what is called surface tension, which means that the surface molecules of a liquid or any mobile body are in a state of stress different from those in the interior. It is pictured as being practically like a skin, is less easily displaced and offers greater resistance to ingress or egress or puncture than elsewhere.

Electrical phenomena have thrown a good deal of light upon the actual conditions of molecules of all sorts when in solution. Thus what is called electrolysis was a puzzle for a long time, for when a current of electricity is passed through a liquid, as water, for a simple case, the water is not only decomposed but the products appear at different places, the oxygen at the place where the current enters and the hydrogen where it leaves the liquid, and this quite independent of the distance between these two points. If a current were thus sent through the breadth of the Atlantic Ocean the oxygen would be set free on one continent and the hydrogen upon the other. Grotthus' hypothesis was that each molecule in the line between the extremities was decomposed by the current, and when combinations occurred each molecule was differently constituted than before; that is, each atom of oxygen combined with a different pair of hydrogen atoms. The difficulty with this hypothesis was it assumed a vast deal more energy expended to do the decomposing than was observed to be actually expended. Clausius, a German physicist, saw the way through this puzzle when he applied thermo-dynamic considerations to it. This is that at all temperatures the constituent atoms of all molecules are constantly vibrating and bumping against each other with greater or less impact many millions of times per second. It thus happens that some atoms must all the time be loosening their holds, and for a brief time be quite detached from the atoms they are combined with. This process of decomposition and recomposition must be going on all the time in all liquids. If there be any directional activity that can give a free om a heading towards one place rather than another, it will move such free atom so it would not combine with the same element it was with before, but with an adjoining one in a position to combine, so there would be a constant stream of atoms of one sort moving in one direction and a corresponding movement of the other element in the opposite, without the expenditure of external energy to any considerable extent.

Now, in a mass of protoplasm, which is largely liquid, the same temperature changes must be going on, and one would expect similar changes of constituents would be taking place, for the same reason. Within the substance where surface tension is not a controlling factor structural changes must be going on, not necessarily all of different constituents, but of similar ones. At this instant this atom of hydrogen or oxygen is a real constituent part of the molecule, the next instant it may have bounded away from it so as actually to be detached, but it will return to its former place to remain for an interval. If one were to examine the molecule at the second instant it would appear to be somewhat differently constituted from what it was before. Some of the elements always found in protoplasm are much more easily displaced than others. For instance, nitrogen is a very unstable element in a molecule wherein it may chance to be. All the explosives contain it; gunpowder, nitro-glycerine, the fulminates, possess their vigor on account of the presence of nitrogen, ready on the first opportunity to part completely with its associates to become a wandering Bedouin, resisting captivity and association, and breaking camp upon the least provocation. It can be made to combine chemically only by compulsion. Other elements combine with it by expending some of their own energy upon it, energy which is at once restored when decomposition is effected.

Now if nitrogen is a constituent of what we call protoplasm, and if such activity as I have described be present all the time in it, is it a matter for surprise that changes of various sorts should be observed in it? If one were to inquire for the origin of the changes, would it not be quite sufficient to recount the physical agencies present in all such masses, and that the changes will stop when the element has eliminated itself? I say eliminated itself rather than has been eliminated, for the latter implies some other agency than its own, and there is no need for that. Again, the ability to do something resides in all the elements, without exception. We call it atomic energy. Evidence for it is abundant. Thus, a a definite amount of hydrogen has a definite amount of energy. Combined with oxygen it forms water, but while combination is going on an immense amount of heat is developed. The gases might have the temperature of freezing water at the beginning, but enough heat will be generated by a pound of hydrogen to raise the temperature of a hundred pounds of water 620 degrees. Where did the energy this represents come from? There is but one answer to this. It comes from the atoms themselves, not from elsewhere; not only that, but the energy does not reside in the atoms as heat, for, according to the assumption we start with, the material is at the freezing point of water. Apparently it is not electric, nor gravitative, nor thermal; no matter now in what form the energy exists in such atoms, the point is that each atom has somehow a store of it. It has the ability to do something, and so far is not the inert stuff it has so often been assumed to be. In like manner carbon has an immense amount of energy stored in it when it appears as if it were inert and dead. A pound of coal, when allowed to combine with oxygen, transforms enough of this energy to raise the temperature of 100 pounds of water 140 degrees, the equivalent of 11,000,000 foot pounds, enough if applied to itself to raise it 2,000 miles high. Is matter that possesses such a store of energy to be counted as inert and unable to do *anything* unless acted upon by some force?

During the civil war the disheartening head lines of the daily papers all too frequently read "All Quiet on the Potomac." A spectator upon the field might have seen individual activity enough, though the army as a whole did not change its position. There was as much energy in the army while it stood still as when it was on the march, or in the roar of battle. In like manner there is as much energy in a pound of coal when it is quiescent as when it is active in a steam engine. The activity is of a different kind, but none the less real.

When carbon combines in any partial way, that is, does not unload its energy so completely as it does when combining with oxygen in a flame, it still has the remaining energy for disposal. Thus it happens that in food stuffs containing carbon the reduction is not complete: hence food stuffs have a supply of energy made available when changing its carbon, hydrogen and oxygen to carbon dioxide and water, setting free as we say the energy of foods. Bread and butter are valuable for food, because they are stored with energy in an available form for nutrition. Our digestive apparatus is not fitted for abstracting the energy of coal in a direct way; the process has to be started. A pound of bread and butter has about 9,000,000 foot-pounds of energy, while a pound of carbon has 11,000,000. When the combustion has been complete in digestion and for bodily expenditures in one way or another the product is carbon dioxide, as in combustion, and there has been given up 9,000,000 foot-pounds for the bread and butter.

Protoplasm of all sorts, as it can be used for food, is a substance loaded with energy available for physiological uses in an organism. It differs from the final products of decomposition, the fully oxidized products, in the fact that it possesses a relatively large amount of energy, while carbon dioxide and water possess a minimum. In order that carbon dioxide and water should again be decomposed, energy has to be spent on them in some way. Thus, to get the hydrogen and oxygen in their original gaseous form 48,000,000 foot-pounds of work have to be spent. This may be effected by a current of electricity or by heat; anything that will separate the elements, but that amount of energy has to be returned to those elements, and 11,000,000 to the pound of carbon. One does not need to know in what form energy exists in the ultimate atoms in order to be certain it is there and in definite quantity. Energy is the ability to produce pressure or to move bodies. It exists in various forms; mechanical, as when a body large enough to be seen has visible motion; molecular, when the movement is of the molecules, too minute to be seen. We call some manifestations of it heat, some electrical, some physiological. Some of these molecular forms are fairly well made out, as that for heat, which we describe as vibratory, or electrical, which we describe as rotary, but for the chemical energy of carbon or of foods we have only a glimpse, and that glimpse is indicative of electric character. It remains to be explained how a quiescent body of ordinary temperature can possess more energy per cubic inch than can be given to any mass of matter in a mechanical way, nevertheless, as it can be made to give it up at will, as is the case with gunpowder, and restored to it by reversing the process, there is nothing more mysterious about it than there is in most other physical phenomena.

So far one may say that the difference between carbon dioxide and protoplasm is not only one of complexity of composition of form and of internal structure, but of inherent energy in an easily transformable shape, where transformations are taking place continuously, but with rapidity which depends upon temperature and amount of moisture, the latter simply for facilitating the exchanges.

Thus it is that there is more energy in atoms than in any combination of them, and the looser the combination the more energy. The assumption has generally been made that the great difference between living things and dead ones is that the living ones have ability to store energy and grow, while inanimate and inorganic things only run down by decomposition; but if the free elements have more energy than they have in any combination, then living things do not store energy any more than non-living things, for the new structures built have less energy than the materials out of which they were built. All the so-called organs of animal structures are composed of these complex energized molecules, and all physiological functions are but the steps by which this energy is changed from its more concentrated form to more diffused forms, and there is nothing in the whole line of phenomena but a series of physical and chemical reactions. I use the word chemical here in its ordinary sense, but really chemistry is that department of physics which is concerned with the disposition of atomic energy in combinations, which, as I have already said, is absolutely determined by temperature and has no existence apart from it.

The factors, then, of physiological phenomena are the kinds of matter found in inorganic things and the kinds of motion and energy which give to the kinds of matter their characteristic properties. The phenomena exhibited with these factors depends upon the inherent qualities of the atoms themselves, and it is certain that the old notions concerning their nature and possibilities must be profoundly changed, for the old is altogether inadequate, and no one to-day knows enough to say what matter cannot do, for such a one makes ignorance do duty for knowledge. What can be strongly stated is that the variable factors are heat and electricity, for these determine chemical reactions in the body as well as out of it. For a long time heat was the only physical factor employed for chemical purposes in inorganic processes. Lately electricity has been utilized, and has made possible many reactions which were either impossible or required a long time to effect, such as the reduction of alumina, the tanning of leather, the making of potassium chlorate and sodium carbonate. Is it not altogether probable that the selective chemistry of tissues of all kinds is to be helped in like manner by employing the same agent, and that only present lack of knowledge prevents its successful use in promoting normal physiological processes and destroying abnormal? Anthropologists are telling us there are few if any individuals of any race that are thoroughly sound; that all are in a more or less diseased condition. That means that cellular structure does not distribute to physiological structure the proper kind and amount of physical energy needed. The trouble is with the cells, not the organs. And the trouble with the cells is instatability, due to lack of available energy, ultimately electrical, if there be any truth in what seems to be implied in all molecular structures, for every atom has its electro-chemical equivalent or electrical energy, which is disposed in this way or that, as it is held more or less stable in its molecule.

When science in all its departments is quite rid of the ghosts called forces, and both thinking and effort are directed to the real factors in phenomena advancement will be rapid.

In both science and the mechanic arts improvements go from the complicated to the simple. Mechanisms to produce certain results are at first sometimes ridiculously complex and change to ridiculously simple. Such was the case with Faber's talking machine compared with the phonograph, and there is every reason to believe that physiology is repeating the same inverse process, and is being reduced to few and simple factors.

THE TREATMENT OF DISEASES OF THE PELVIS BY OPERATING THROUGH THE VAGINA—VAGINO-PELVIC OPERATIONS.*

By Homer I. Ostrom, M.D., New York.

THE extension of what may be designated as vagino-pelvic surgery beyond the removal of the uterus, belongs to the past few years. Surgeons have been, and are still, slow to recognize the advantages which this method possesses of entering the pelvis, and dealing with diseases in that region, and have until quite recently given their preference to the abdominal route for the treatment of damaged appendages, the products of inflammation, and all uterine tumors, save those of small size, or of a malignant nature, located in the cervix uteri.

I apprehend that this is chiefly owing to three causes: *First*—This region of the body was first made accessible through the abdominal opening, and surgeons devoted themselves to perfecting that method of operating. *Second*—Some of the conditions now reached through the vagina had not attained the position of accurate diagnosis nor received a correct pathological interpretation, in the early days of abdominal surgery. *Third*—The limited field for manipulation afforded by the vaginal opening presented obstacles to the control of hemorrhage and to the ocular examination of the parts involved in the operation, that unnecessarily increased the risk to life without offering any compensating advantages.

With a better understanding of pelvic pathology, and the confidence that belongs to knowledge, the original lines of abdominal surgery have broadened until the vaginal route for operating now occupies a legitimate position among the methods of reaching pelvic diseases.

It is my present purpose to outline the class of cases in which the vaginal operation is the one of election.

Three anatomical facts appear when studying the pelvis in reference to vaginal operations. *First*—If the operation does not involve removal of the uterus or the appendages, in the majority of instances it can be made extra-peritoneal; that is, without opening the abdominal cavity. *Second*—The vagina is the anatomical drain for the pelvis. *Third*—Manipulations through the vagina can be conducted with a minimum degree of disturbance of the abdominal viscera.

With these considerations before us, the ideal boundary line for vagino-pelvic operations will rest upon mechanical possibilities; practically it will rest upon the individual manipulative skill of the operator. What one operator may consider entirely practicable, another will discard as out of the question, or as involving so much unnecessary time, and hence liability to shock, as to be unjustifiable.

In point of fact pelvic operations done through the vagina, do, on the whole, call for more manipulative skill than when done through an abdominal incision. The field of operation is mostly out of sight, and hence, the extent of the operation must be determined by the touch alone, and frequently adhesions separated and arteries ligated unaided by the eye. Again, beyond natural limits the field of operations cannot be enlarged, which offers an obstacle to the free use of fingers or instuments. The advantage, however, of this method of operating must ever stand before us as an incentive for increasing our manipulative skill, and perfecting our operative technique.

We do not need to discuss vaginal hysterectomy. The operation as such is a well recognized procedure, and using clamps or ligatures, sewing the peritoneum or leaving it open for drainage are matters of individual preference, the differences in technique, given equally skillful operators, not seeming to influence the results. But the limits of the operation fall distinctly within the present inquiry; that is to say, we have to determine how large a tumor of the uterus, and what pathological conditions, can be removed through the vagina.

It is evident that no precise limit as to size or weight can be given. In general, we may say that a tumor rising out of the pelvis is not a suitable one for the vaginal operation, but if the vagina is large and capacious, as in multipara, and the uterus can be dislocated by the process of *morcellemant*, even larger tumors can be removed by this method, with the great advantages over the abdominal, that have already been mentioned.

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* Read before the New York State Homœopathic Society, September 23, 1896.

In performing this, as well as other operations upon the uterus, it is well not to lose sight of the fact that hemorrhage is temporarily controlled by traction upon the uterus; therefore if the organ is constantly pulled down against the scissors or curette and never relaxed, danger of hemorrhage may be eliminated from the operation. I do not wish to assert that by traction upon the uterus a hysterectomy is made perfectly bloodless, and thereby the securing of arteries rendered unnecessary. By tension of the arterial trunks that supply the uterus, the flow of blood is arrested, and by the time the uterus and tumor are delivered, these arteries are brought in view, and can be dealt with according to the individual preference of the operator, but the traction controls hemorrhage during the operation.

Solid tumors necessitating hysterectomy, are removed with less difficulty than when the uterus is left in the pelvis, but even under such conditions it is perfectly possible to operate on tumors of considerable size. The manipulation will then be facilitated by accurately establishing the location of the neoplasm, whether it is anterior, posterior, or lateral to the uterus, for the incision for the operation should, in general, correspond as nearly possible to the shortest route through which it can be reached and extracted.

For an exploratory opening, I have found the vesico-uterine space to offer advantages which lead me to make this my point of election when I wish to enter the pelvis from below. The passage to the fundus, and laterally to the ovaries and tubes, is shorter than that offered through a posterior opening, where the examining finger must traverse the hollow of the sacrum before these parts can be reached, for while the ovaries lie behind the broad ligament when the body is prone, the finger, having gained the fundus, will have no difficulty in reaching the appendages, and with much more certainty be able to map them out, having the Fallopian tube for a guide, than when approached from behind.

Now as to the technique of removing solid tumors from the pelvis through the vagina when the uterus is not amputated, perfection has not yet been reached. The process of removing small portions at a time, already referred to, does not appeal strongly to the surgical sense. At the best it is a justifiable makeshift, no more, and will only satisfy us until something better is proposed. I have done the operation several times successfully, but under a mental protest, and have decided that where the tumor is of such size that by splitting in half it cannot be removed through the vagina, or of such a variety that it cannot be peeled out of its capsule, the operation thus becoming extra-peritoneal, it is better, if the operation has been begun through the vagina, to finish it through the abdomen. The fact of the vaginal opening does not, I think, materially add to the risk of opening the abdomen, and in some respects facilitates the manipulation. For while I favor the vaginal operation, I am able to recognize that it, in common with other surgical procedures, has its limits, and that we are not justified in subjecting our patients to unnecessary risks in order to prove a theory, or give an exhibition of our manipulative skill.

While some tumors of the uterus are best operated on through the vagina, I apprehend that the chief adaptation of the vagino-pelvic operation will be found to be the treatment of that class of diseases more or less associated with pelvic inflammation, either of the ovaries, tubes, or peri-uterine tissues. Almost every collection of pus or fluid within the true pelvis is accessible through the vagina, and in many instances can be operated on without entering the peritoneal cavity.

We have only to consider the pathology of this form of disease to verify the statement. First: Purulent collections, whether these are in the ovaries, tubes, broad ligaments, or outside of the uterus, can with the aid of bimanual manipulation be brought within reach of the outlet of the pelvis, and further, the inflammation that preceded their development has usually been associated with sufficient peritonitis to induce adhesions between serous surfaces. When these adhesions take place below, they are in the region of the vault of the vagina, and the conditions are most favorable for an extra-peritoneal operation, and even when the adhesions are to the abdominal viscera, and the pus sac must be removed, the abdomen is, to a certain extent, protected from the invasion of any escaped fluid, and it, together with the field of operation, is left in the most favorable condition for drainage.

While mere collections of pus are intra-peritoneal, they but depend upon inflammatory adhesions to make them extra-abdominal at the time of operating. Quite diffferent are collections of fluid between the layers of the broad ligaments and beneath the peritoneum, in the peri-uterine spaces. The peritoneum is then separated from the underlying tissue, and the fluid, obeying the laws of gravitation, falls naturally to the lowest part of the pelvis, and can readily be reached through the vagina. It is these cases that give such brilliant results when operated on from below, rather than above the pelvic bone.

In this class falls ectopic pregnancy, until recently attacked only through an abdominal incision.

The majority of exta-uterine pregnancies rupture in the early months, either from the free border of the Fallopian tube, or between the layers of the broad ligament. In the former case the hemorrhage from the first being free in the abdominal cavity, becomes, if left long enough, encysted, and shut off from the general cavity by inflammatory adhesion. These sacs usually point in the posterior cul-de-sac, and if the hemorrhage is repeated contain a vast quantity of blood, clots, and broken down tissue. If the rupture occurs between the folds of the broad ligament, the base of the ligament is separated, and the vault of the vagina forms the inferior wall of the fœtal sac.

The indications for operating are here plainly made out, and involve comparatively little risk. The main question turns upon the treatment of the placenta, whether the operation is performed before or after secondary rupture of the broad ligament sac has taken place.

My desire is always to leave a surgically clean operative wound, but if removal of the placenta involves an otherwise unnecessary opening of the peritoneal cavity, I prefer not to disturb the placenta, but to pack the sac and allow the tissue to slough away. I have operated in this manner, through the vagina, five times, and have in each instance had occasion to remark not only upon the rapidity with which the placenta separated itself from its attachments, but also upon the degree of shrinking that took place in the structure, the quantity coming away being astonishingly smaller than there was reason to anticipate it would be. Though convalescence is somewhat retarded by this method, in none of the five cases referred to have any complications arisen from the slightly prolonged suppuration. The fœtal sac is treated upon the same lines that other granulated cavities are treated, packed and drained.

It seems to me the cases of ruptured ectopic pregnancy that are proper ones for the vaginal operation—and from the uncertainty in diagnosis few cases present for treatment before rupture takes place—embrace the larger number of instances of this erratic method of gestation. The pathology is confined to the pelvis. In the majority of instances, unless the operation is done for a primary rupture, the general abdominal cavity is easily shut off, and entrance from below insures an extra-peritoneal operation. The only condition under which I favor a laparatomy is when the operation is undertaken to save life from hemorrhage, the result of primary rupture. The abdominal cavity is not then closed, and must from any point of approach be opened, and the bleeding vessels are at that time more directly reached through the high opening. There is, moreover, in the abdominal operation, less disturbance of the healthy ovary and of the uterus, factors that should not weigh much against opening the peritoneum, but that should be taken advantage of when the operation cannot be extra-peritoneal.

A word in passing concerning the time for operating. The extra-uterine fœtus in any condition or situation must be regarded at the best as a menace to life, and a constant source of apprehension that may suddenly tax our resources to their utmost capacity. But while we hold ourselves ready to rectify this mistake of Nature, when the rupture takes place, which is generally the first indication we receive of the condition, let us not be too ready to offer assistance. There is in surgery always time to consider. In the first place, if there is profuse hemorrhage there is usually corresponding shock, but the conditions under which the hemorrhage occurs favor its limitation. In the second place, unless the case is of such an urgent nature as to demand an immediate interference in order to save live, we are not justified in operating during shock. I am aware opinions differ on this point, but I venture to emphasize my belief, as founded upon over twenty years of active surgical practice. I have never operated during shock that I did not subsequently regret having done so.

Having, therefore, a self-limited hemorrhage, and shock, of which the hemorrhage is the chief cause, and believing that the conditions are exceptional in which we should operate during shock, I wait, not necessarily until a second rupture, which will surely take place, and by so doing I avail myself of the processes of Nature, which will by adhesive inflammation close the general abdominal cavity above, and thus render it possible to remove from the vagina the extra-uterine fœtus, together with the products of rupture, without the certain risks of an abdominal operation.

It becomes a nice question to decide how soon after this primary rupture we should operate. The point must be determined upon clinical grounds, and upon the general rules which govern the healing process. Reaction will follow rupture, and this will be accompanied with some degree of pyrexia; when this has subsided we may safely conclude that the desired protective envelope has formed, and the favorable time for operating arrived. Usually this will fall within two weeks of the rupture. When we feel certain that this time has arrived, there is no occasion for further delay; the vagina should be opened, and the sac cleaned out.

With our present well defined lines for the diagnosis of ruptured ectopic pregnancy, there should be no mistake in recognizing this condition, and equally, I think, there should be no question as to the time to operate. If we wait until a second rupture, we have waited too long, for by so doing we have subjected our patient unnecessarily to a second shock, and its attendant risk to life. A vagino-pelvic operation for ectopic pregnancy as early after the primary rupture as we feel sure adhesive inflammation has closed the abdominal cavity, is attended with slight risk, and is, it seems to me, the ideal method and time to operate.

Opening the abdomen for septic peritonitis, while theoretically approved, has hitherto been a therapeutical failure, and while I am among those who believe that no treatment so far devised will prove of the least avail in a well marked case of this lethal disease, I am confident that the condition is amenable to surgical asepsis, not only in its early stages, but beyond the time when it is usually considered to be hopeless.

Let us consider the pathology and the therapeutic indications.

Briefly, we have a toxemia which attacks the heart, the composition of the blood and the nervous system. The generators of this poison having gained access to the abdominal cavity, continue their process as long as they remain there.

Operative surgery should be able to accomplish the removal of the septic organisms, and place the peritoneal cavity in such a condition that they could no longer find in it a culture medium. This is the limit of operative surgery; the poison already in possession of the system must be met with drugs, the discussion of which does not fall within the scope of this paper.

As far as I am aware, operations for septic peritonis have heretofore been made only through the abdomen. I am not here speaking of the emptying of pus collections, but refer to cleansing the general abdominal cavity. My recent success in operating through the vagina in two desperate cases of septic peritonitis, has led me to question whether this is not the more scientific method of dealing with these cases. Both were post-operative; one an abdominal hysterectomy, the other a vaginal liberating of the utero-sacral ligaments for retro-flexion of the uterus. In neither could the source of infection be traced, and I am inclined to consider both as instances of the not very rare intestinal infection—auto-infection.

In the abdominal operation there was of course the superior incision, but this was re-opened only sufficiently to admit one finger for the purpose of guiding the irrigating trocar introduced through the vagina. In the other, the manipulation was carried on through the vaginal opening. Both were severe cases, with rapidly failing heart and intestinal paralysis, and both recovered.

These two cases do not furnish sufficient data upon which to build either a theory or a method of treatment, but I think the operation deserves a further trial, and I believe it will prove a legitimate extension of the field of vagino-pelvic surgery. My present theory of the advantages of the vaginal over the abdominal operation for septic peritonitis, is that the vaginal operation always causes less shock; that the abdomen can be cleansed, by the aid of my long glass irrigator, quite as effectually and with less disturbing of visceral adhesions, a most vital point in dealing with these cases, and that whatever counter openings may be made for drainage, and these should be made fearlessly in obedience to hydraulics, the vagina offers the most perfect natural route for draining the pelvis.

ON SHOCK AS RELATIVE TO SURGICAL CONDUCT.

BY ORANDO S. RITCH, M.D., BROOKLYN, N. Y.

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IN considering this subject we might inquire first as to the extent we would be justified in operating.

The gynæcologist will tell you to operate as much as you can at one sitting; the general surgeon is more cautious.

Why is the surgeon cautious in large amputations to cut through the tissues with rapidity, but when he comes to saw through the bone and marrow to go slow and watch the patient for fear of a sudden shock and the patient expiring at once? Why are patients so severely shocked for removal of traumatic cataract?

Why are extensive injuries and bruises without much loss of blood watched with its utmost care? Why do we regard injury to the testicles with great apprehension? Is it because we fear shock, which may result fatally to our patient? What do we understand by shock, as applied to surgery? The general literature upon the subject seems to convey the idea that pathologists are not at all agreed as to the phenomena. The terms prostration without reaction, neuro-paralysis and stupor are about the only terms used, so that we have come to look at it as a condition producing death, following an injury without much loss of blood. Some pass it over as a general nervous depression and let it rest at that. In a case of supra-vaginal hysterectomy my patient was doing well, but she began to sink without apparant cause and died, and I satisfied myself that the operation being strictly aseptic, shock carried her off. A case of double subcutaneous osteotomy: I operated on one leg with dispatch, and repeated the same operation on the other. I thought as the patient was profoundly anæsthetized shock would be reduced to the minimum, but to my surprise the shock was so terrific that I barely saved the little fellow's life. It was the experience in this case which impressed the subject strongly on my mind and I determined not to repeat the procedure. I believe that frequent anæsthetizing is far preferable to too much surgery at one time. In a case requiring double amputation I determined to amputate one leg, wait for reaction, the other limb being dressed antiseptically and subsequently removed, with complete recovery. In order to bring this picture more vividly before our minds, we will suppose a healthy patient suddenly stricken with a compound fracture, but not much loss of blood. The surgeon decides to operate, the patient watches his every move with the closest scrutiny, there is not a muscle of his body in motion, the eyes are fixed upon the operator, he becomes anxious, his features are pinched, he feels faint. A cold, clammy sweat appears upon his face, you recognize the condition, and become anxious. Will you operate immediately? No, you must wait for the patient to react, but his lips are pale, his pulse is weak, there is a subnormal temperature per rectum—and that, by the way, is the only place to take the temperature in this condition—he makes no muscular action to assist you; although there is no paralysis, you notice he breathes very lightly, there is insensibility.

You say he is dying, only to be followed by—he is dead! Such a picture as that seems to my mind to portray the condition. Now, what has caused this? First we say the injury, but what effect has the injury upon the system to produce shock? First, vascular disturbance, and second, nerve irritation. The best explanation is by

Fisher, who claims that the great mass of blood becomes stagnated in the veins, and as the skin is pale and cold, and without sensation, the muscles being deprived of blood cannot perform their functions. This seems to explain the loss of muscular powers, implicating those of respiration, which reduces the heart's action, produces muscular weakness, and accompanied with a reflex vaso-motor paralysis, seems to make the theory still more plausible. This could be verified by the shock following a superficial burn, covering a large area; this reflex vaso-motor paralysis is practically inhibitory; that is, when a nerve has been directly excited by injury or operation it seems to repel or thwart the action of muscles to which motion, volition and sensation are ascribed. This does not apply to the external muscles alone, but affects the heart and lungs. In shock we find no sensation to muscles, showing that the nerve plays an important part, while such is not the case with fainting, so that it is not the loss of blood we have to fear as much as the time consumed in an operation, and the parts handled or incised. We are aware of the sudden and great loss of blood occurring in women in the lying-in chamber, but stop the hemorrhage and the patient will recover, while if it produced more than syncope we might have many deaths to report. We are not unduly alarmed because anæmia is not a symptom of shock. I think the sudden evacuation of fluid contents will *not* produce shock, but fainting, syncope, coma, insensibility and death. Sudden death from so-called emotions of joy or sadness may assume the type of shock, because the nerves play an important part toward the heart; especially would this be true if the pneumogastric or its branches were excited.

The more the peripheral sensitive nerves are interfered with, the more reflex to the cord, nerve tissue and brain, and this direct or indirect irritation is conveyed to the heart and internal organs, which reduces the muscular power, produces vascular stagnation, and we arrive at the same point from another route. The brain is rarely other than clear, except just before death, which may help to account for the profoundness of the shock, and we judge that the sudden and great injury to peripheral or sensitive nerve terminals produces the most profound depression, so that it would appear that the immediate result of our work must be taken into consideration in deciding upon procedure. Because tracheotomy can be performed without anæsthesia does not argue that it is good surgery to do it, because a patient is helpless and barely able to comprehend what is going on. That it is wise to operate without profound anæsthesia; so far as primary, secondary and insidious shock is concerned, I believe they are largely one and the same. The primary is not usually one, when the symptoms appear soon after the traumatism and if this continues for a few days it might be called secondary, but it is practically a continuation of the first, and I believe that an insidious shock is a primary attack where Nature has failed to fully react. The causes of shock are as varied as the multiplicity of severe injuries, and are usually observable and detected, unless one is of the opinion that shock is produced by pain, which would hardly seem to be the case. We know of patients suffering severe pain from disease for an indefinite length of time with no shock, while the sudden irritation of nerve centers or terminals produce it. In acute septic inflammation, as observable in wounds of the intestines, a collapsed condition is presented, which is a form of shock, and this is one of the conditions where symptoms of sinking and those of shock are quite similar. As to what can be accomplished when we are met with this condition depends largely upon circumstances. The first thing to settle is to thoroughly comprehend what is likely to be the result of our procedure. It would seem to me, although I am not quite ready to advocate it, that the promiscuous and liberal use of wet cloths and towels covering the exposed surface favor the lowering of bodily heat. That the too free use of irrigation, both external and internal, acts detrimental to the system, and I want to say by way of parenthesis, that I am an advocate of asepticism to the last degree, but, if I understand irrigation to mean cleansing and disinfecting, then, when we have accomplished that, it is obvious, though we start irrigating at 110° Fahr., the second effect of heat is cold, and it will come quickly and shock to the nerves is the result. There are times in the earnestness of operating when these conditions are not closely cared for. It would seem that warm, sterilized towels would answer the same purpose as antiseptic wet ones. Another preventative is to anæsthetize the patient outside the operating room, on account of the surroundings. We should plan our work for operating so as to reduce the time to the shortest period commensurate with the work to be accomplished, and after operating, to place the patient in a resting or recovery room close by, with as little disturbance as possible. As to the picture I depicted much might be said. I am becoming convinced that there is not much gained in immediate procedure when a patient is suffering severe shock, the result of injury. If the parts are properly protected and the hemorrhage controlled with strict antiseptics, a few hours' rest will greatly benefit the patient, and he will be able to stand the ordeal of an operation much better. We should not allow haste and excitement in emergency cases to dominate our better judgment. As to heroic prevention, transfusion used to be employed, but now is largely done away with, or at least ought to be, for in its place we have infusion of saline solutions, which may be injected into the median caphalic vein, or into the abdominal tissues, or by warm enemas of a quart every half hour. The usual solution is :

℞. Sodii chlorid. ʒ iss
Sodii bicarb. grs. xv
Aq. distill. ℥ iss.

Statistics show that in shock, especially if associated with an ex-sanguinated condition, that the lower bowels will absorb the saline solution with wonderful rapidity. As far as the stomach is concerned black coffee can be given, and this followed by digitalis, in gtt. doses, and if these fail, alcoholic stimulants.

THE CONFUSION OF THE MATERIA MEDICA RELATING TO THE THEORY AND PRACTICE OF MEDICINE.*

BY ELMER LEE, A.M., M.D., PH. B., CHICAGO.

DURING a recent visit to a patient, there happened to be present an old colored woman, who had recently recovered from a long illness. She told how sick she had been and how infrequent were the visits of her friends. On one of the sick days, she asked the Lord for just one favor. Her supreme desire, at that moment, consisted of a supplication that the Lord might give her a few drops of water to cool her throat. She informed me that the Lord was very busy attending to the white folks, so much so that it was not in her heart to make him any more trouble than was necessary. The draught of water was granted, and the simple faith of the old woman was forever established in the belief of the direct mediation of the Lord in her behalf.

A banker, dangerously ill, begged of his attendants, prior to my visit, for a cup of cold water, and the request was denied. Upon my arrival, he ventured to repeat the desire for cold water, thinking, that perhaps, it would be again denied. His gratification, when the water was given him, was both a delight to the physician and a surprise to the anxious and tearful wife. The severe and protracted vomiting which had occupied the greater part of the day, immediately ceased upon swallowing the cold water. The simple request of the patient had been regarded with fear and trembling by the inexperienced and untrained observers of his misery.

The actual demands of Nature are exceedingly few and simple. The recitals just given indicate two illustrations of the real demands of Nature when prompted to express itself. When the study of medicine is begun, during the years of adolescence, the alarm of the student on account of its vastness is well-nigh unbearable. A student confided to me that his fear of inability to remember the materia medica, strongly induced him to reconsider his plan of lie. The outlook, he said, appalled him. He felt the responsibility that would attach to the career of a physician, conscious of the confusion in his estimate of the agencies used for the cure of disease.

The list of remedies recommended by the standard authors for the cure of disease is, indeed, enough to bewilder thought. The new forms which are daily added to the old list, are destructive to the peace and tranquility of even the mature medical mind. When the first pharmacopœia was prepared, in the days of Nero, the total number of articles contained therein was sixty. Prior to this formal collection, remedies for internal use were seldom thought of, and scarcely ever used. The cure of disease was accomplished during the Hippocratic period by the use of hygiene and by external applications. The success of one who became celebrated at this time, consisted in his wondrous ability to mix an odd collection of strangely incongruous substances into a mysterious concoction. Since that day, a glance at the materia medica, as it exists, is sufficient to show that changes have occurred. Taking it all in all, perhaps the change is for the better. The present materia medica is too voluminous to practically examine, and a determination of its value is beyond the range of a short life.

The study of Bartholow during college days was as interesting as a romance. Fothergill's elaborate practice, and the prescriptions which it contained, surprised and delighted the inquiring mind. The recommendations were closely followed, and hope of the recovery of the sick was believed to be near at hand. The shock which followed disappointment of the expectations has never been forgotten. Page upon page of the materia medica was scrutinized for fresh material with which to meet urgent and anxious appeals from the patients. Experience after experience taught, that after all, the cure of the disease was remotely dependent upon the materia medica. The first decade of the physician is a series of experiments with the recommendations of the text-book. The failures which ensue are ascribed to inexperience, and hope springs afresh, in each instance, that a little more experience will teach the correct use of the all-powerful healing agents. The medical life wears on, and the hope of greater triumphs is deferred from time to time. The realization of the fond expectations of a perfect system of scientific medication ends in disappointment. Is this not the experience of the medical profession? Benjamin Rush exclaimed on his dying day that diseases were multiplied, and their fatality increased. It seems that the greater the array of material provided by pharmacy for the treatment of disease the greater the contention and the increase of confusion. Medical men are widely separated in their views in the estimate of values of different plans of treating disease. No common agreement prevails to any degree. During each generation some special form of medication has occupied the professional mind. One thing has followed another. A close student of the history of medicine will discover that which seems to be new is for the most part really old. We ask each other what is new? referring to what is good. There is always much that is new, but what is novel is not always useful. The prevailing tendency during our generation has been the development of an endless number of synthetic products from the laboratory of the chemist. Still more recently the development of a plausible system of treatment is based upon morbid animal fluids. It matters very little what the remedy is or from what generation it takes its origin; throughout the whole series the best that can be said concerning them is that they are drugs. There is no natural place in the human economy for drugs. Symptoms are sometimes controlled, modified and supressed by the administration of the chemic agent, but it does not follow that the amelioration of a symptom is the same thing as the cure of a disease. In fact, the disease is cured by Nature and the public gives the credit to the drug, which is, fortitously or unfortuitously, swallowed. It is very well understood by the profession that the influence of pharmaceuticals upon the health of the body is practically a harm. But the estimate of the public is in favor of the apothecary.

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* Read before the American Academy of Medicine, Atlanta, May 2, 1896.

My words are directed to confreres and not to laymen. The views, therefore, uttered by me are spoken in the deepest sympathy and with the utmost confidence in the intelligence of the profession. The pharmaceuticals offered for the use of the profession to-day number more than 10,000 preparations. The number of proprietary and patented medicines, which are recommended both to the profession and to the public by their makers, constitute a large percentage of the remedies which are prescribed. The tendency is to accept the teaching and the direction of corporations, whose scientific knowledge and interest in the profession is generally secondary to the pecuniary gain. We constitute a body of self-sacrificing and indomitable seekers for knowledge, and must forever regard invasion into our territory, by the self-interested vender of proprietaries, with suspicion.

Each successive group of medical graduates is elated by whatever prevailing medical belief that is popular at the time of his advent into the profession. Thus, it is seen, that incidents and training have a great deal to do with the views which are entertained, even at a later period of a career. From infancy the belief in the value of the drugs of the apothecary is impressed upon the mind, and remains as a guiding principle throughout the existence of the individual. A mother gives the child soothing syrup and paregoric, and anoints the chest with turpentine and lard, which produce upon the mind of the infant an impression which is never lost. The true or false value of these agencies has nothing to do with the fixed lesson which is remembered. It can be seen that owing to these drug impressions upon the young and growing mind, how difficult are reform processes in treatment, both in lay and professional ranks. The student is influenced by the lecture, and refers to the notes of the lecturer or the author's text-book. It was a common practice during the teaching of one celebrated lecturer to address the class somewhat like this: "Gentlemen, this is a case of asthma; not much is known of asthma, and the treatment is found to be very disappointing. The thing to-day is to find out what *drug* best agrees with the patient and to continue it." Whatever may have been the opinion by the class, the recollection that a *drug* was recommended is most difficult to remove from the memory.

The more numerous the list of remedies, the greater the confusion and difficulty for medical minds to consummate any agreement upon disputed ground. Differences in diagnosis exist, of course, but are infrequent compared to the wide disparagement between opinions with reference to the treatment of disease. The object of medical study and the practice of the profession of medicine is for the exclusive purpose of rendering practical assistance to the sick. All other questions are subordinate to the actual requirements indicated by danger of death. It is not within the scope of my present remarks to advocate a remedy for the evil to which these observations pertain. There is, however, a system of treatment of every disease which is either remediable or curable, which does not contemplate the long rows of black and vari-colored glassware which ornament the apothecary's shelves.

In no other allied science would such a state of confusion be tolerated as that between the materia medica and the theory and the practice of medicine. Chemistry is definite, physiology is definite, and anatomy is stable; therapeutics based upon materia medica are unsettled. When may we expect a change for the better? Is it to come through the use of horse serum? Emphatically, no. Will coal-tar products reduce the materia medica to a science? No. The profession has been going on for over 3,000 years, studying the diseases of the body and experimenting to find out a system of therapy which is scientific. It is as far to-day from that perfection, which is desired by all, as it was 100 years ago. There were those at that time who succeeded in both ameliorating and curing disease. Such persons are among us also to-day. But the great mass of physicians, as well as the great majority of the patients, are controlled by a system of therapeutic reason far from scientific. There will be exceptions to my views, but the exceptions will melt away upon sifting the actual facts of the case. It is not my intention to throw any blame upon the manufacturers who are contributing these preparations, nor is it my purpose to unsympathetically criticise the practice of the profession. The state of affairs is accepted as the best by the majority and doubtless will continue. There has been confusion from the inception of the science of medicine, and it probably will go on indefinitely. It is my desire to call attention to the appalling burden which the materia medica has placed upon us, with reference to correcting the methods of practice, as taught to the students of our medical colleges.

ANTHRAX.*

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I HAVE here a pathological specimen which I think is of interest on account of its comparative rarity, as we are told, in this community. It is a specimen of blood which was handed me July 13th, by Dr. Albers, veterinary, for examination. Dr. Albers had been called to see some cows in the neighborhood, a number of the herd having been taken suddenly ill, and three of them had died within the short period of twelve or twenty-four hours. He diagnosticated the condition as anthrax, a disease that has probably been studied more thoroughly than any other known bacterial affection, and one that is possessed of much practical importance, affecting as it does the human family as well as the *genus bovis*. It is an infectious disease caused by the anthrax bacillus, a comparatively large bacillus of typical shape, recognizable even without making a culture, which is found in the blood of animals affected, forming a true septicæmia according to the definition of Koch.

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* Read before the Louisville Clinical Society and reported by C. C. Mapes.

Dr. Alberts invited me to be present at the autopsy upon one of the animals, but as it was impossible for me to be on hand, he sent me a specimen of the blood for examination. The specimen was stained July 14th. The blood cells have been mostly destroyed, but the specimen is filled, as you will observe, with the bacilli of anthrax, which have a typical and characteristic appearance, leaving no doubt as to the correctness of the diagnosis.

I will exhibit the specimen and invite you to examine it, and while you are doing so I would like to make a few remarks. I think these cases are of considerable interest to us, and the subject merits serious consideration. The matter has already been reported to the State Board of Health, and it is to be hoped they will take proper action to prevent dissemination of the disease. Prevention here is of more importance than curative measures, and it seems to me that the first thing to be done is to destroy the infected animals and so protect the community from the ravages of this disease.

Anthrax is one of the most malignant diseases peculiar to animals, and is also looked upon as extremely dangerous to the community, as regards the human family, and adequate protective measures ought to be promptly instituted. I am told that the infected animals have been allowed to run around in the pasture for a week, even after the diagnosis of anthrax had been made; three of them died in the pasture with the other animals. One of the animals, at the time it died, was in a pond of water, so I am informed, and probably passed bloody contents of the bowel and bloody urine into the pool of water; other animals feeding in the same pasture are likely to drink water from the same pool, and the danger of further infection is thus largely increased. The animals that died, I understand, were sent out to the slaughter house, thus incurring the danger of infecting the men who work with the skins.

To my mind there is great danger of the poison contained in the blood of these animals being communicated to the human race by handling the infected parts, especially if there exists the slightest injury about the hands of the operators or those skinning the dead animals. I understand this is the first practical demonstration of the anthrax bacillus that has ever been made in the State of Kentucky.

Dr. Alber states that he thinks for the past two or three years there have been at different times cases of anthrax among the cattle in the same locality, and it is more important for this reason that proper steps be taken to exterminate the disease. The disease seems to have existed in that locality for several years, and each season makes its appearance, causing the death of several animals.

Infection occurs, as we all know, in this manner: The blood itself contains the bacilli; these bacilli can be easily destroyed if we use the proper methods. They form spores only if they come in contact with the air. If some of the blood of these animals, from bloody urine or bloody fæcal evacuations, is deposited on the meadow grass or land where they pasture, the bacilli will very readily form little bodies which perpetuate this organism, and which are very tenacious, the so-called spores. The spores are very hard to destroy, even by chemical methods. There is danger that the disease will perpetuate itself in a certain locality; these spores may remain for months, or even years, until a favorable condition presents for their development again into bacilli, which are taken into the stomach with food, thus causing the disease.

The symptoms of anthrax in animals are bloody discharges from the bowels, bloody urine, collapse, great swelling of the abdomen; and they usually die within from twelve to twenty-four hours after first symptoms appear. On pathological examination we find outside of this condition of the blood the serous cavities filled with more or less bloody serum. All the lymphatic organs, especially the spleen, are markedly hyperæmic. The kidneys contain the bacilli, as do also the lungs, spleen and other organs of the body, constituting as has been stated a true septicæmia.

The bacillus of anthrax can be easily demonstrated with the microscope; with a drop of blood unstained, in two minutes you can make the diagnosis. The anthrax bacillus is recognized not only by its size, for there is no other organism as large, but also by its shape, the so-called bamboo appearance. The organisms join together, forming an appearance very much like the joint of a bamboo stick.

In the specimen which I show you the blood has disintegrated, and the bacilli are so numerous and characteristic that they can be easily recognized, whether you have ever seen the organism before or not. They have been stained by Loëffler's methylene-blue.

I consider the existence of anthrax in the community as a danger which cannot be looked upon with too much importance. As to the destruction of these bacilli: Boiling the meat will destroy them. If the meat has been exposed to the air for a short time, however, spores will develop and imperfect boiling will not destroy these. They are more resistent than the spores of any other organism, hence the danger from this source is correspondingly increased. Thorough boiling will destroy the organism itself, but the spores will often escape. A temperature of 145° will destroy the germ, while it requires a temperature of 236° for destruction of the spores.

An important point to be considered in this connection is the disposition of the bodies of animals that have died from anthrax. The bodies of the animals ought not to be opened. They ought to be buried deep in the ground. Superficial burial is not safe, as the bacilli may be brought to the surface at some future time and further infection occur. Cremation would probably be the safest method, but so far as I know nothing of this kind has ever been carried out in this State, and we have no facilities for such disposition of the dead bodies.

DISCUSSION.

Dr. William Bailey: After a careful investigation of the cases of anthrax reported near this city, as a member of the State Board of Health, I will say that there are two herds of cattle infected, three having died in one herd and one in the other. The herds represent approximately thirty head each, just at the outskirts of the city.

I regard it as the most serious condition we have had among cattle in this State, from the fact that it is not only dangerous to valuable herds of animals, but it is likewise dangerous to the human race. In the specimen before us the bacilli are thoroughly demonstrated; if there is any bacterial disease it is anthrax, and the demonstration is absolute and complete. The germ itself is easily destroyed. As already stated, a temperature of 145° destroys the bacillus of anthrax, but unfortunately this is not true as regards the spores; this is one of the spore-producing germs, and meat containg the spores requires boiling for more than half an hour for their destruction. Temperature up to 235° or 240° should be continued for a considerable length of time if you suspect that there has been formation of spores, in order to prevent possible infection afterward, so that the only proper disposition of the carcasses of the dead is total destruction by fire. Burial does not answer the purpose, although this is practiced. Deep burial might give you extermination, and yet it might not. It has been demonstrated that from carcasses buried to a depth of four feet, germs have come to the surface; whether brought up by earth worms, by water, or in whatever manner, they have come to the surface and as cattle grazing upon this ground have become infected months or even years, as much as five years afterward, it may be the source of contamination. So it is a very difficult thing to remedy, and consequently the only safe process is absolute and entire destruction of the carcasses, and if it were possible this should be done by putting them into a crematory and bringing about absolute destruction by fire. I would say that in regard to the present cases, unfortunately this has not been the disposition. Before it came to the knowledge of the Board of Health, three of these cattle had already died and had been carried away by the dead animal contractor and disposed of as you know they are: The contents of the intestines are mixed with bone, etc., for fertilizers, and no doubt the skins saved for their value, which may be the source of malignant pustule to some poor man who has the handling of these hides. They may now be in the market or in the vats of the tanner, and may be the source of subsequent trouble. The disposition of these products we have been unable to follow out. I admit it would have been most desirable, if it were possible to have accomplished it but the matter was not called to the attention of the Board of Health sufficiently early to do so.

The danger from the milk, I take it, is more from the possibility of a sore upon the udder or teat of the cow, from which a drop or so of blood might contaminate the milk, than from the milk itself. I am not prepared to say that the milk from an animal so diseased contains the germ, but if you will investigate the authorities you will find a very large percentage of cows carelessly cared for are, as a rule, subject to lesions upon the udder or teats, and from milking a drop of blood might easily contaminate the milk supply, and that would be quite sufficient to make it dangerous. At any rate, I would not think that the milk from such a cow was at all safe to be used. Fortunately, the cow so diseased ceases almost immediately to give milk. The sickness is so promptly developed that attention of the owner is called to it, and they are so seriously diseased from the very inception that there is not much danger of the milk being used from a cow after she becomes the subject of the disease. Death takes place, as a rule, promptly. The cow shows serious trouble and the temperature becomes elevated, which, however, does not continue for a great length of time. Later on in the history of the case, the temperature may be normal or even sub-normal. With the inception of the disease, however, there is usually an elevation of several degrees. She is found in her stall or place where she is kept, with marked depression, with pulse rapid, and fever; unable almost to stand; she leans against the halter or side of the stall; she is dejected and depressed; goes into collapse and dies in this way, frequently, as I have stated, having bloody discharges from the bowels, also bloody urine, etc. The malignant pustule does not supervene when the disease is propagated by infected food being taken. The malignant pustule is a local lesion, consequently we find it on the mammary glands of a cow so diseased, or upon the hands of those handling the hides of these cattle. In this way malignant pustule is a local infection, but when the bacilli are taken into the stomach, or taken into the intestinal tract, it may be the beginning of infection by lesion of the mucous membranes of the mouth, gullet, stomach or intestines, or it may pass into the lungs and cause trouble there. From this, infection may be carried into other structures of the body. Thus it will be seen that the meat is dangerous, as is also the milk, particularly if there is any possibility of a drop of blood getting from the animal into the milk.

Cases have been reported where large herds have lost twenty, thirty or forty head, and when the balance of the herd were removed to higher, more open country, put upon new pastures they have been quickly relieved; that is, new cases have not developed, and in those animals infected the disease was not so fatal. Of the first cases, like all endemics of this kind, nearly all of them die. Later on a large per cent. of them may get well.

I am inclined to think there has been no anthrax in that neighborhood before, although it would be very easy indeed for it to be an infected district, because of the readiness with which the bacillus of anthrax lives and may be perpetuated by means of the soil. Certain kinds of soils seem to be particularly favorable for the preservation of these germs, the clayey soils, those that do not dry out well, low lands, those which are marshy, etc., seem more favorable to the growth and development of the anthrax bacillus than dry, higher ground. It may be on account of the water that is retained, or that in some way the soil is suitable for their development.

The period of incubation of the disease (anthrax) is from one to six days; it may develop in twenty-four hours, and cases have been reported where the disease has come on as late as ten or twelve days after exposure, but three or four days is the average period of incubation.

Some one has asked the question whether the anthrax antitoxin has been employed in these cases. We have had so little to do with anthrax in this country, that I suppose a supply of the antitoxin is not kept on hand, as is the case for diphtheria. I will say that antitoxin has not been used in these cases, and I doubt if it could be found in Louisville. Statistics show that in cases where the anthrax antitoxin has been used the disease was exhibited in a much milder form. Although the remedy does not seem to be curative, the course of the disease is rendered more mild, and many of the infected cattle recover, but like diphtheria antitoxin, it should be employed early in the case.

TALKS WITH YOUNG MEN ON THE SEXUAL FUNCTION.

By W. F. MORGAN, M.D., LEAVENWORTH, KANSAS.

PART III.

IN these informal talks reference has already been made to practical therapeutical hints that have been found useful in the treatment of certain diseases of the sexual organs.

Although we are chiefly considering prophylactic measures, I will offer a few more suggestions which may be utilized by those unfortunately deprived of the care of a good physician. However, it should be distinctly understood that in all serious or persistent forms of disease, the advice of a physician is usually indispensable, and should be as promptly secured as may be possible under the circumstances. And just here allow me, at the risk of seeming too much influenced by the *esprit de corps*, to advise you to always avoid the peripatetics, who, in traveling from place to place, are able to shirk the just responsibility of their acts, but rather seek the well-known and permanently located practitioner, who is always at hand, and knows that he may be called upon at any time to explain to a jury of his peers the whys and the wherefores of his medical practice.

Let us again refer to the important matter of diet:

Though each one should learn his own peculiarities, still very few young men can use cheese, or eggs, or asparagus for the evening meal without being annoyed the following night by erections, frequent urination and possibly by seminal emissions, etc. And yet if these are eaten from eight to twelve hours before retiring and the meal is followed by exercise, they may do no harm. Even watermelons, when partaken of near the hour for retiring, will generally cause excitement of the sexual organs, a fact said to be fully appreciated by our colored brethren. In fact, anything which increases the activity of the urinary organs, is liable, at the same time, to excite the sexual organs. The basis of treatment of spermatorrhœa and hyperæsthesia of the sexual system, is a diversion of the nervous force from these organs to the brain and muscular system. This principle serves to explain the fact that college girls sometimes experience an arrest of the menstrual flow, which is again restored at the close of their arduous studies, and it also explains why it is that a supreme effort of either mind or body, and often the mere anticipation of such an effort, serves to extinguish all sexual desire. This abeyance of desire sometimes becomes habitual in those whose minds or bodies are kept in a condition of constant tension.

In applying cold water to the genitals, a convenient method is found by taking an ordinary ten-quart pail and perforating the bottom for attaching a rubber tube with clamp. The tube should have a ¼-inch nozzle, and be two yards long. The pail, filled with cold water, is suspended by a hook six feet from the floor. The patient sits over a bath-tub and allows the stream of water to fall upon the genitals from five to ten minutes. The beneficial effect seems due to the impact of the water, combined with the cold. The best time for this douch is generally just before bedtime.

In many cases water as hot as can be comfortably borne produces a better and more permanent effect than cold, and in applying it only a quart cup is necessary, the genitals being simply immersed in the water from five to ten minutes. When the scrotum is pendulous and the parts are relaxed, and especially where there is a varicocele, a suitable bandage may be made by taking shoemaker's webbing and cotton flannel for lining. Strong safety pins are better than buckles. The bandages sold in the shops are generally too slight to exert the requisite degree of compression, but a cheap one may be purchased to serve as a pattern. When the knack is once acquired of making a proper fit in the scrotal bag, no further trouble is usually experienced. The opening for the penis should generally be just large enough to receive the tips of four fingers, and thickly lined with cotton flannel. If the scrotum is pendulous, the redundant scrotal tissue should be drawn through the opening by the side of the penis. A bandage of this sort will promptly arrest the constant tendency of a varicocele to increase in size, and will cause it to gradually decrease, and at the same time afford much comfort to the wearer, by giving a sense of firm support, and by relieving the dragging pains so characteristic of the disease. To avoid becoming too dependent on artificial support the bandage should be left off an hour each day. I have been thus minute in describing this home-made bandage, as one of my hearers has modestly informed me that he is lacking in even that "little ingenuity" requisite for making it without a fuller description than was before given.

The condition of the rectum and bowels also exerts a potent influence over the sexual organs. It is necessary to establish the *habit* of regularity in the action of the bowels, and nearly always this is practicable. As constipation and spermatorrhœa are frequently associated, I will offer a few suggestions as to the best method of securing a daily evacuation. A proper diet is of the first importance. Vegetables and fruits should be freely used, and, half an hour or more before breakfast one or two tumblers of cold water can usually be drank without discomfort and with decided benefit. Good beef and stale or graham bread are staple articles, and may be occasionally exchanged for others, according to the peculiarities of each case and the particular form and stage of the disease. When the patient feels a call to empty the bowels it should, if possible, be promptly attended to, otherwise the peristaltic movement of the intestines seems to be often reversed, returning the contents of the rectum to the colon, and thus a very serious form of constipation is sometimes produced.

If practicable it is well to have a regular hour for stool and never permit this time to pass without the daily movement. Until this habit of regularity becomes fixed the first attempts may fail. Then go about your usual duties, but give due heed to the first intimation that the bowels are ready to act. It frequently requires less time and trouble to have two, or even three, evacuations a day than one, for the obvious reason that in the former case the fæces are more fluid in character and hence pass more easily. At first it may be necessary to resort occasionally to the use of a syringe, and when the condition of the tongue and general system demand the use of laxatives, nux vom., sulphur, or hydratis canadensis, or cascara sagrada will usually relieve. When it is necessary to make a more decided impression, the following combination is useful:

℞ Aloes	gr. j.
Strychnia	gr. 1-10
Ext. belladonna	gr. ss.

M. et ft., pil. six.

Sig: Take one pill morning and night until freely moved. When at stool do not hurry, but give the bowels plenty of time to act.

Benjamin Franklin was of the opinion that in matters purely moral and intellectual the most practical basis for self-improvement was the cultivation of a *habit* of right thinking and acting, and that when such a habit became permanent, it was just as easy to think and do right as wrong.

And if it is permissible to transfer this idea to things physical, I would say that when all the bodily functions are trained to act in a normal and regular way, then we have perfect health. And no one can be healthy who continually resorts to the use of drugs, which, like crutches for the lame, should be as soon as possible cast aside. In concluding this particular phase of our subject I would quote the axiom: "Keep your head cool, your feet warm, and your bowels open."

So far as drugs are concerned in the treatment of spermatorrhœa, we usually need very few. Nux vomica is often useful, especially when there is constipation, potassium bromide and camphor mono-bromide when drug sedatives are required, and for the hyper-sensitive urethra the occasional introduction of the steel sound. The galvanic current is sometimes useful, in some cases the faradic is better, and in still other cases both forms of electricity may be required.

A patient suffering from spermatorrhœa should have his bedroom well ventilated, and use as little bed covering as possible without decided discomfort. His mattress should not be too soft, and he should rarely indulge in a feather bed, even in the coldest weather. Seminal emissions occur more frequently when the patient is lying on the back, and in order to avoid this position he may adopt the simple expedient of tying the neck of a six or eight ounce vial into the back of his night shirt, so that when he turns upon his back the uncomfortable pressure of the vial between his shoulders causes him to awake and turn again upon his side.

Constitutional and tonic medication may be used, according to the special indication in each case. In the incipient stages of a gonorrhœa, aconite and acetanilide are useful for fever and pain. The bowels should be kept open and alkaline drinks given to correct the hyperacidity of the urine. The patient should be kept quiet—if possible, in bed—and his diet should be light and unstimulating, combined with local applications of hot or cold water, and he should have the care of a medical man.

If any of my hearers now have questions to ask I will try to answer.

First Hearer: Doctor, in your study of comparative physiology, have you learned any facts bearing upon the effect of sexual intercourse during pregnancy.

Doctor: Yes; I have learned only of one viviparous female among the lower animals that is known ever to voluntarily receive the embrace of the male during pregnancy, and that is the mare, and very few mares are of this sort. The best colts seem always to come of mares that refuse the horse after conception has occurred. Instead of wasting any of her nervous force in useless sexual intercourse, the best brood mare reserves it for the more perfect development of her embryo.

Second Hearer: Does this rule also apply to the human female?

Doctor: So far as I know it does.*

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* We have known of instances in which this was not the case.—EDS.

First Hearer: Doctor, I understand that men sometimes act as if the marital relation permitted them to ignore the inclinations of their wives regarding sexual intercourse. Can you give us any facts from comparative physiology which have a bearing upon this matter?

Doctor: Instances have come to my notice of men owning valuable mares which would never voluntarily take the horse, and which were coerced. But in every case the result was unfavorable. I think this shows very plainly that "*instinct*" is often wiser than the so-called reason of man. In writing of dyspepsia, I recall that the late Prof. Austin Flint once made a similar observation regarding the instinctive longings of the appetite for certain articles of food.

First Hearer: Doctor, occasionally I seem to become slightly mixed in my conceptions of the different "instinctive longings;" *e. g.*, a man and woman may desire intercourse, when if indulged and followed by pregnancy, the consequences might be very serious.

Doctor: Your remark is pertinent, and just such instances afford an opportunity to use those higher faculties which we, as men, possess, and which have been denied to the lower animals. In woman, when the desire is based upon the pure maternal instinct, it is at once lifted above the plane of mere animal instinct, and usually relates to one man—by the Divine as well as human law—her husband. And thus alone, with very rare exceptions, is individual well being promoted, and human society held together. Every experienced physician has met women in whom the maternal instinct is so strong that they submit to intercourse even when, as sometimes happens, it is attended by severe pain, rather than be thwarted in their desire for offspring. Other women, of character and veracity, have testified that, though the mothers of large families, they have never experienced pleasure in sexual intercourse.

Third Hearer: Doctor, have you found instances among the lower animals to parallel those just mentioned as belonging to our species?

Doctor: Yes, so far as the mere begetting of offspring without the sexual desire is concerned.

Fourth Hearer: Doctor, I have lately read this little book (which I hand you) inculcating the peculiar sexual doctrines said to have been held by the members of the Oneida Community. If you have studied these doctrines, I would be much obliged if you will give us your opinion of them.

Doctor: Well, I have investigated—to some extent—these doctrines, but fear that, were I to answer your question as fully as it seems to deserve, both our time and our patience would be exhausted. However, I will state briefly that while the sexual doctrines of the Oneida Community enforce a partial self-control, we must admit that they are better than a complete surrender to mere passion. Still, they teach only a mitigated form of sensuality, and so far as I can learn, no very permanent, happy or healthy organization of family or community has ever been built upon this sandy foundation.

First Hearer: Doctor, how frequently can the average woman pass through the process of gestation with justice to herself and her offspring?

Doctor: Well, there are, of course, exceptions to every general rule, but I think the average interval between births should be about thirty months. Some can bear a healthy child every two years; others need an interval of three years or more. I have met with but few women having such an over-plus of vitality as to enable them to develop a healthy child *in utero* and at the same time nourish another at the breast. Besides the drain of child-bearing, the vast majority of parturients have so many other demands upon their minds and bodies that even a very large stock of health is sometimes exhausted.

Third Hearer: Do not the conservative forces of Nature often protect women from too frequent conceptions?

Doctor: Yes; and it is quite generally known, for example, that they are less liable to conception during the period of lactation.

Fourth Hearer: Suppose conception should occur when the mother is nursing an infant of, say, three to six months old, what is liable to be the result?

Doctor: Unless the mother has an unusual amount of vitality, either the child at the breast is liable to sicken, or there may be a miscarriage, or the mother's health may break down, and in some extreme cases her own life, the life of the nursling and the embryo, are all lost.

Fourth Hearer: Are lives often sacrificed in this way?

Doctor: Certainly; and I have learned from the veterinary authorities that the Jersey cow in particular, yielding as she does a very large amount of rich milk, when allowed to become pregnant too frequently, gives birth to more weakly calves, which, as well as their overburdened mother, are more liable to be attacked by tuberculosis than are animals placed under more favorable conditions. As before stated, the physiology of man seems to rest upon precisely the same basis as that of the lower animals, among which, so far as the reproductive organs are concerned, is to be found the substantial counterpart of nearly every physical condition presented by the human being. And in order to avoid these penalties, it is only necessary to employ self-restraint, or, in other words, to enforce the same rules of good sense and good judgment upon ourselves that we do in the management of our domestic animals.

The sole object of life is development. No one ever reaches his physical, mental or moral ideal, but every one can make the best and the most of the organization with which Nature has endowed him.

The time allotted to our discussion having now expired, I wish to say to those of my hearers who have expressed an interest in our talks upon the sexual function, that I have been thus explicit and emphatic in presenting these views, for the reason that thirty-four years of practical experience as a physician have convinced me of their importance. We are taught by the great lessons of history that individual families and nations, when at the very zenith of their power, their wealth and their fame, may be attacked and destroyed by the dry rot of sensualism; yet, through the Divine law of evolution, mankind as a whole seems to be advancing steadily and irresistibly toward a higher and better way of living.*

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Hyoscin Hydrobromin in the Treatment of Insanity.—Dr. H. R. Costons, in an original communication to the *Nashville Journal of Medicine and Surgery* for August (*Am. Med. Rev.*) says: Hydrobromin of hyoscin in doses of from one-fiftieth to one-twentieth grain, far exceeds all other remedies which I have ever used in any form of insanity. It must be given freely. I have never seen any bad results from its use, and in a case of acute melancholia with insomnia of a week's duration, which I had the pleasure of seeing in consultation with Dr. Davis, in which morphine and bromides had no effect, I gave one-tenth grain at one dose, and the girl was asleep in two minutes and slept eleven hours. She made a good recovery. After a large dose the patient will make a few gasps, and unless you are well acquainted with the action of the drug—not from reading but from bedside observation—you will think he will be dead in a few minutes; Let the patient alone and he will be all right; go to administering restoratives and you will kill him.

Disinfection of the Mouth in Scarlatina.—The *American Medico-Surgical Bulletin* states that at the Société des Hopitaux, in Paris, M. Lemoine recently advanced the theory that the period of contagion in scarlatina is at the beginning rather than at the close of the disease. According to this view, the secretions of the mouth and pharynx are the dangerous elements rather than the desquamating epithelium; the disinfection of these cavities should, therefore, take first rank among prophylactic measures, and the period of isolation to which cases of scarlatina are at present subjected should be considerably shortened.

This theory is important, in that other eruptive diseases, as measles and smallpox, may perhaps be transmitted by the same means.

Until the pathology of these diseases is better known, it seems rational treatment to disinfect the mouth and pharynx, thus possibly rendering a service both to the patient and to the attendants.

The Alcoholic Treatment of Carcinoma.—Dr. Hasse, Nordhausen, read a paper on this subject at the Surgical Congress (*Med. Press and Circular*). He had made a communication on attempts to treat carcinoma by alcohol in 1878. The treatment consisted in the injection of alcohol into the circumference of the growth, and in three cases of carcinoma of the uterus had led to good results. He continued his observations for a year, and since then he had waited. After twenty-three years all the patients were alive and well. This result was very remarkable, and was superior to that obtained by surgery. The treatment was suitable for mammary carcinoma. It had the inconvenience of taxing the patience of both patient and surgeon, but it had the immense advantage of protecting against recurrence. The treatment owed its success to the formation around the growth of a connective tissue capsule, that obliterated the blood vessels and induced shrinking of the tumor. He asked his colleagues for further cases to treat.

Erysipelas and Syphilis.—Rudolph (*Centralbl. f. Inn. Med.*, Feb. 1, 1896) cites the case of a woman, aged twenty-five, who, five years after contracting syphilis, was suffering from severe headache, paresis of the left side of the face, and occasional clonic spasm. In addition, there were enlarged submaxillary glands and a chronic arthritis affecting both knees. Syphilitic cachexia was marked. She had been through several courses of anti-syphilitic treatment, including mercurial injections and inunction. After an attack of erysipelas the patient was cured of her chronic syphilis; the glands went down, the pains in the head and joints disappeared and the facial paralysis gradually yielded. For a year she remained free from any syphilitic manifestations, when a gumma appeared in the leg. She would not submit to further anti-syphilitic treatment. The rapid and beneficial effect brought about by the erysipelas in this case was striking. The cure was not permanent, but the erysipelas had more effect on the disease than the anti-syphilitic treatment.

Aristol for Burns.—In an Italian journal (*Incurabili*) Dr. Eriberto Aievoli has recently reported his experience with aristol, and expresses the opinion that in fresh wounds, burns and frost-bites, the remedy is deserving of extensive application, as it fulfills all the requirements demanded in these conditions. These properties are, essentially, lack of toxicity, rapid relief of pain, and rapid formation of a non-contractile cicatrix. The drug was always employed in a 10 per cent. ointment, which was spread on sterilized gauze and applied to the affected area. Two cases are described in detail, relating to extensive burns of the second and third degree, which healed rapidly under applications of aristol ointment, while other remedies had proved inefficient. A special advantage of this treatment was the ease with which this dressing could be removed. Owing to the slight secretion and the formation of healthy granulations, the dressings did not become adherent and could be removed without pain. The superiority of aristol over boric acid was constantly demonstrated.

Guaiacum in the Treatment of Gout.—Garrod (*Lancet*, May 30, 1896), at a meeting of the Royal Medical and Chirurgical Society, read a paper upon the above subject. Numerous observations, covering a period of many years, led him to believe that he had been successful in establishing the following points in regard to action of guaiacum:

1. Guaiacum was innocuous, and might be taken for an indefinite period of time, and looked upon as a condiment rather than as a drug, as harmless as ginger or any other condiment.

2. Guaiacum possesses a considerable power, but less than colchicum, indirectly relieving patients suffering from gouty inflammation of any part. It might be given whenever there was but little fever.

Guaiacum taken in the intervals of gouty attacks had a considerable power of averting their recurrence; in fact, it was a very powerful prophylactic.

4. Guaiacum did not appear to lose its prophylactic power by long continued use.

5. There were a few persons who could not readily continue the use of guaiacum. For such cases there were other drugs whose action was in some respects similar as prophylactics—perhaps serpentary was one of the most powerful of these.

In the discussion which followed the reading of the paper, Dr. Murrell said that he could support Sir Alfred Garrod's conclusions as to the efficacy of guaiacum in chronic gout. He had used the drug during the last six years at the Westminster Hospital, not only for chronic gout, but for rheumatism, tonsillitis, and chronic bronchitis associated with the gouty taint. He preferred guaiacum in large doses, namely, 20 grains three times a day, the resin being about four times the strength of guaiacum itself.

The Treatment of Sciatica by Compression.—According to the *Bulletin Med. de Paris* (*N.Y. Med. Jour.*) M. Negro has reported 113 cases of rebellious sciatica in which the above treatment has resulted in recovery. The procedure is as follows: The patient lies on his face with his legs extended and resting easily one against the other. The most painful spot is selected—the region where the nerve proceeds from the large sciatic opening. On its trunk both thumbs are applied and it is compressed with the greatest possible force. At the same time slight lateral movements are made without changing the point of pressure or moderating its intensity. This takes from fifteen to twenty seconds, and is followed by an interval of twenty minutes' rest, when the procedure is repeated. After a second application, which is much less painful than the first, the patient is able to walk, and for several hours, or even a day, he may be free from pain.

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* In the quotation from Emerson, Part II. of this series, lax should be tax, so to read: "So signal is the failure of all attempts to make this separation of the good from the tax," etc.

In order to obtain complete recovery, says the author, this procedure should be practised about six times a day every two days, until the definite suppression of the neuralgia is obtained.

Thermo-Therapeutics of Gonorrhœa.—Neisser has stated that the gonococcus loses its power of development at a temperature of 113 degrees. Callari (*Gaz. Degli Osp. e Degli Clinic.*) has found that the normal male urethra will bear this temperature and the female two degrees higher. He has been treating gonorrhœa with injections at 113 degrees and reports a progressive disappearance of the gonococci in the majority of cases with this treatment. In order to avoid unnecessary congestion he injects a 6 per cent. solution of cocaine ten ninutes before.

Normal Salt Solution.—Dr. Warren B. Outten, Professor of Surgery in Beaumont Medical College, St. Louis, maintains that normal salt solution acts with vigor and success in the treatment of a suppurating wound, and unless there is a great amount of pus, dressings can be left on for eight days without change. He further declares: "It can be demonstrated that a wound treated by the corrosive sublimate solutions and other antiseptics sometimes remain painful, but when a change is made by using the saline solution, ease is manifested at once. Again, the granulations show less tendency to exuberance and inflammation, and present a regular, uniform and healthy-looking surface. We certainly believe that the withdrawal of irritating antiseptics in the treatment of granulating wounds, and their replacement by mild, unirritating aseptic solutions, will be a positive and common-sense advancement in the treatment of suppurating wounds and superficial inflammation."

RETROSPECTIVE DIETETICS.

How Much Water Should We Drink?—According to Prof. Allen we should drink from one-third to two-fifths as many ounces as we weigh in pounds. Therefore, for a man weighing 168 pounds there would be required fifty-six to sixty-four ounces daily, or from one and one-half to four pints. This the *Journal of Hygiene* regards as a very indefinite answer. The amount of water required depends on the season of the year, the amount of work done and the kind of food eaten. In hot weather we require more than in cold, because of the greater loss through the skin, though this is in part made up by the lesser amount passed away through the kidneys. If a man labors very hard he requires more than if his labor is light. A man working in a foundry, where the temperature is high and the perspiration profuse, not infrequently drinks three or four gallons daily.

If the food is stimulating and salty more water is required than if it is bland. Vegetarians and those who use much fruit require less water than those who eat salted fish and pork, and often get along on none except what is in their food.

In most cases our instincts tell us how much water to drink far better than any hard or fixed rule. For ages they have been acquiring a knowledge of how much to drink, and transmitting that knowledge to descendants, and if we follow them we shall not go far out of the way. It is of more use to us to know that pure water is essential, and that *impure water is one of the most dangerous of drinks*, than to know how much of it is required daily.

If one lives in a region where the water is bad, it should be boiled and put away in bottles well corked in an ice chest, and, in addition, one should eat all the fruit one can, if fruit agrees. Fruits contain not only pure water, but salts which are needed to carry on healthfully the functions of life.

Diet as a Moral Agent.—We learn from the *Medical Review* that a food experiment is being tried at the Elmira Reformatory, in this State. All civilized nations hold out some inducements to the criminals in confinement to sooner secure their release from legal restraint. A certain amount of time is always taken off for good behavior. The criminal has often been exhorted to this end by relatives and friends. His manhood, his future, his ambition and his hope of quick release from confinement have been appealed to, and in many cases in vain. Now it is to his stomach that the appeal is to be made.

The proposed experiment contemplates a somewhat enlarged scale of dietary privileges, increasing from grade to grade, from the lowest to the highest, so that within due and proper limits they can out of their own accumulations have the privilege of selecting meals at their pleasure. The prisoners, under the wage-earning system of the Reformatory, as it is at present, must earn their living and keep a credit balance to their accounts, respectively, in order to progress towards their release by parole. A prisoner, to maintain a credit balance, must needs restrain, regulate and exert himself in a manner which accomplishes and shows his improvement; but hitherto the diet rate has been inflexible. It is believed that if more latitude is allowed and the prisoner has a chance of tickling his palate occasionally with mince pie, a juicy roast or other homelike dainties, he will be more likely to make an extra effort to reform. In other words, if he has an inviting menu to choose from for breakfast, dinner and supper he will get up and hustle and be a man.

Necessity of Strict Dieting in Skin Diseases.—Brocq (*Jour. de Med. et de Chir.*, March, 1896; *Med. and Surg. Reporter*) insists that not only are there certain kinds of food which provoke immediate eruptions of the skin, but that others act with a more delayed effect. It is generally easy to obtain from a patient a promise to abstain from food that produces ill effects, no matter how pleasing it may be in taste, if these effects are immediate, but when the effects become apparent only after the lapse of considerable time, as in gout or rheumatism, it is hard to obtain such a promise. Yet it is reasonably certain that effects upon the skin are often produced as remote in time from the ingestion of the deleterious articles of food, as in the case of these two named diseases, although unfortunately for science, this remote effect is denied by the majority of dermatologists.

It then seems logical to advise arthritic people to observe a strict diet if they wish to avoid annoying eruptive attacks. They should particularly abstain from coffee, liquors, wine, beer, dark meats and acid vegetables and fruits. Persons affected with acne must avoid salty cheese, preserved meats and fish. These precautions must be particularly observed when an attack is imminent, because of development of the morbid predisposition. The articles of food mentioned can play a role of accidental cause under these conditions and have an immediate pathological effect.

Cancer and High Feeding.—It appears from the last issued report of the Registrar-General that the proportional mortality in England from cancer is four times greater than it used to be half a century ago. A remarkable decline in the death rate from phthisis and tuberculous disease has coincided with this great increase in the cancer mortality, hence there is some truth in the curious paradox that a high cancer mortality is an indication of good sanitary conditions. No single factor is more potent in determining the outbreak of cancer in the predisposed than high feeding. The gluttonous consumption of meat, which is such a characteristic feature of the age, may be regarded as especially harmful in this respect. Statistics show that the meat consumption in England has now reached the amazing total of 126 pounds per head per year. When excessive quantities of such highly stimulating forms of nutriment are ingested by persons whose cellular metabolism is defective, it is likely that it may excite in those parts of the body where vital processes are still alive, such excessive and disorderly cellular proliferation as will eventuate in cancer. No doubt other factors co-operate, and among these may especially be mentioned deficient exercise in the open air.

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EDITORS:
EGBERT GUERNSEY, M.D. ALFRED K. HILLS, M.D.

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REMOVAL.

The office of this Journal was removed, May 1st, to 180 West Fifty-ninth street, Central Park South.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 108 Fulton St., N.Y.

DISCOVERY OF ANÆSTHESIA.

THE "semi-centennial anniversary," recently held in Boston, of the discovery of anæsthesia, suggests the question: Was Dr. Morton really the discoverer of anæsthesia in 1846, or did Dr. Wells, of Hartford, precede him by two years, making the real discoverer not Dr. Morton, but Dr. Wells, and the correct date, not 1846, but 1844? On the 10th of December, 1844, Dr. Colton gave an exhibition of nitrous-oxide or laughing gas. While under its influence the person fell and severely bruised himself, but stated later to Dr. Wells that at the time he felt no pain. This first suggested the idea to Dr. Wells that he was dealing with an anæsthetic, and the next day, December 11, 1844, under the influence of the gas he had a tooth extracted without pain. This was the first tooth ever drawn without pain. It is on record that at the suggestion of the venerable Dr. Marcy, now of this city, but at that time in active practice in Hartford, Dr. Wells, in 1844, gave sulphuric ether to a gentleman for the removal of a wen from the scalp, the operation being entirely painless. Two years ago the U. S. Dental Association gave a grand celebration in Philadelphia, of the fiftieth anniversary of the discovery of anæsthesia by Dr. Wells, which called together over 2,000 people, including members of Congress, college professors, physicians, etc. In the very able papers read at that meeting, the history of the grand discovery was established beyond a doubt, and the credit given to Dr. Wells. A monument, costing $5,000, given by the State of Connecticut, now stands in Bushnell Park, Hartford, Conn., erected to the memory of Dr. Wells, giving the date of his discovery of anæsthesia. After the death of Dr. Wells, a bill was introduced into the United States Senate, at the request of Dr. Morton, giving him $100,000 for his discovery. The Hon. Truman Smith, from Connecticut, presented on the floor of the Senate, in a masterly argument, the real facts in the case, and established so conclusively the claims urged by the friends of Dr Wells, that the bill was defeated by thirteen majority. It was during this period that a wealthy gentleman of Boston left $10,000 in his will to commemorate the name of the man who discovered the anæsthetic power of ether. The monument was erected, and stands in the Public Garden of Boston, but no name has as yet been recorded upon it.

Great credit was undoubtedly due Dr. Morton for introducing the discovery to the profession in such a way as to immediately claim their attention and insure their enthusiastic support. He saw in the facts so clearly established by Dr. Wells a broad avenue open to unlimited wealth and a world-wide reputation, and sought to utilize facts, already established, for his own benefit and the good of humanity, and in this he was not alone. The world is full of cases where the inventor or the originator of a great truth has not had the tact or the energy to make it available to the public. The body of the real discoverer of chloroform, an old army surgeon of the War of 1812, rests in an obscure grave in Sag Harbor, almost unknown. He never for a moment dreamed that he was one of the greatest benefactors of the human race that ever lived, nor would he have been had not the quick perception of Simpson, the great Edinburgh surgeon, seen in the White Whiskey, described in the paper of an unknown American chemist, a pain conquering power, the limits of whose influence no man could fathom. To the first the discovery was simply a toy, a plaything; to the other, with its twin sister, ether, an untold blessing to the world.

As Holmes so beautifully says: "The knife is searching for disease, the pulleys are dragging back dislocated limbs—Nature itself is working out the primal curse which devoted the tenderest of her creatures to the sharpest of her trials; but the fierce extremity of suffering has been steeped in the waters of forgetfulness, and the deep furrows in the knotted brow of agony have been soothed away forever."

Anæsthesia and antisepsis are the crowning glories of the profession in the last half century, and the names of those identified with their early history will ever be held in grateful remembrance

PSYCHO-THERAPEUTICS.

THE attention of the profession has within the past few years been more and more drawn to the study of psychology, and to its application to the cure of disease. Following in the track of German scientists, the laboratories which have been established in Tufts, Harvard, Yale and other colleges are creating a new interest in the study of the fundamental principle which underlies the law of psychic phenomena.

It has been so often demonstrated that there resides in man a psychic power which can be invoked under certain conditions for the relief of suffering, and to produce results which seem but little less than marvelous, that there is no reasonable doubt, not only of its existence, but its powerful work in the affairs of the world, and its untold influence on human thought and feeling. These phenomena are no longer relegated to the domain of superstition, but are attracting the attention of our ablest scientists, who, on unveiling that underlying principle which is back of all these phenomena and controlling them, to a certain extent analyze its component parts, measure its velocity and power, and even transmit to the sensitive plate the color of each individual part.

The fact of a dual mental organization is by no means new. It was held by Plato, by the old Greek philosophers, and by the early Christian fathers. Of modern writers who have accepted the dual theory, Prof. Wigar, Dr. Brown-Sequard, and Prof. Proctor are notable examples, and it is now so clearly defined as to form a cardinal principle in the philosophy of the new psychology.

First, we note the objective mind, which, in the language of Hudson, "takes cognizance of the objective world. Its media of observation are the five physical senses. It is his guide in his struggle with his natural environment. Its highest function is *reasoning*.

"The subjective mind takes cognizance of its environments by means independent of the physical senses. It perceives by intuition. It is the seat of the emotions and the store-house of the memory. It performs its highest functions when the objective senses are in abeyance. In a word, it is that intelligence which makes itself manifest in a hypnotic subject when he is in a state of somnambulism."

Looking upon the objective mind as a function of the physical brain, reasoning and taking cognizance of the objective world through the five physical senses, we recognize in the subjective mind *the soul*, having a distinct entity, a mental organization of its own, and capable of sustaining an existence independent of the body, and constantly amenable to control by the power of suggestion, and having absolute control of the functions, conditions and sensations of the body.

Following out this line of reasoning, substantiated as it is by an overwhelming array of facts, we can see in the cures performed at Lourdes, and other holy shrines, in the mind cure, in Christian science, in mesmerism and suggestive hypnotism, various phases of psycho-therapeutics, true in part, but based upon the proposition of a dual mind, the objective and subjective, the subjective having absolute control of the functions, emotions and sensations of the body.

DYSPEPSIA AND CONSTIPATION.

THE more we study the action of the nervous system, the deeper the insight we obtain of the conditions so often present, as yet included under no nomenclature, the varied symptoms often rendering an intelligent diagnosis difficult. These nameless troubles, these complex and confusing symptoms, when included under the general term of neuroses, point to remedies directed specially to local or general nervous derangement, and insure a more consistent and successful treatment.

Dyspepsia in some of its forms, and constipation, have been the *bête noir* of our profession, often defying in diagnosis and treatment the skill of the physician.

We have been interested in an article read before the Canadian Medical Association by Adelstan De Martigny, M. D., on the use of electric baths in various forms of disease, which he claims should be classified as neuroses, specially including their action upon the digestive organs in certain difficult forms of dyspepsia, and upon chronic constipation.

The patient is placed in a bath, insulated, suspended by straps, and the temperature of the water being from 98° to 100°. In the treatment of dyspepsia we must act on the muscular and nervous system. One electrode is placed near the lower part of the neck, not touching the patient, and the other at the lower part of the spine, or at the feet, and directly in contact with them. To influence the muscular system of the stomach and intestines one electrode is placed on the abdomen and the other at the same level under the patient but not touching the body. In constipation a rectal electrode is used, the other being placed on the lower part of the abdomen.

We quote two or three clinical cases illustrating the author's treatment. The first was a lady, sixty-eight years old, who had been dyspeptic for years. Her only food consisted of toast and chicken broth, with chicken or steak at dinner. The least departure from this diet was followed by headache, flatulence, constipation and pain. A few months' treatment brought about a complete cure.

In the second case, the patient had submitted to every imaginable treatment, with no good results. For eleven years she had been vomiting every day, no matter what she would eat. Her weight had been reduced from 215 pounds to 108 pounds when she commenced the baths. The improvement was marked from the first bath. In a few months she had entirely recovered. More than one prominent specialist in diseases of the stomach. holds that seven-eighths of the cases of dyspepsia are due to disorders of the nervous system, producing lethargy of the membranes of the stomach and intestines. In these cases the author believes that electric baths invigorate the patient, regulate the action of the nervous system, and increase the strength of the muscular system of the stomach, bowels and abdominal walls.

GONORRHŒA.

DR. OSCAR WUTER, of Berlin, uses itrol (silver citrate) in gonorrhœa with great success. It is used at first in the form of a weak solution, 1-8000, gradually increased in strength, four times a day. The itrol should be kept in a yellow bottle, and the treatment should be commenced early. He says the drug has an intense gonococcus-destroying action; it is readily borne by the urethral mucous membrane, and causes no noteworthy irritation or increase of the inflammation. Its action is deep-reaching, and without injury to the mucous membrane.

A PREVALENT notion that the Japan ivy and similar plants, which cling to the walls by rootlets, make the walls damp, is the reverse of the fact. Tons of water are evaporated daily from these leaves in the growing season, an amount which they would not draw from the earth. The rootlets suck water from the walls and cool them by their shade in the summer. The action of the famous English ivy on ruins is a practical proof of the drying character. The mortar is so hard and dry that it is difficult to demolish the old walls.

THE first annual dinner and reunion of the Alumni of Ward's Island, now Metropolitan Hospital, will be celebrated November 11, 1896, with a dinner at the Hotel Savoy. From present indications a very large number of the alumni will be present. It is hoped these alumni dinners will be so far successful in the good fellowship produced by bringing together at the festive board those who have occupied positions on the medical staff of the hospital, that they will be anticipated from year to year with pleasure.

DR. DANA found in 108 cases of insanity a deformity of the uvala in fifty-three cases. From this he concludes the twist or bend implies an unequal development of nerve supply of the two sides, and the degenerate uvala is one that has an unequal and defective nerve supply. In more than half of all degenerates Azgos uvala does not act.

CORRESPONDENCE.

PRUNUS VIRGINIANA (CEVASUS VIRGINIANA).

To the Editors of the NEW YORK MEDICAL TIMES:

I am surprised that Dr. Laidlaw, in your last number, should say "Prunus virginiana is altogether neglected by Homœopathic text books."

In my "Therapeutics of New Remedies" I mention it under the name "Cevasus virginiana," which is the proper name. Again I mention its uses several times in my practice.

I am gratified that the doctor verifies its use in coughs "especially when lying down," but I have found Drosera to cure that kind of cough in most instances.

Chicago, Oct. 1, 1896. E. M. HALE.

"DOCTORS OF OTHER DAYS": A CORRECTION.

To the Editors of the NEW YORK MEDICAL TIMES:

"Mea maxima culpa!" Acknowledging my fault, I hasten to correct an error in my article on "Doctors of Other Days," which was kindly pointed out to me by Dr. Geo. L. Freeman.

On account of the character and great attainments of Dr. James Jackson, as well as his association with the men and events of those olden days, I constantly confounded him with *Dr. Charles T. Jackson*, who suggested the use of ether, which Morton so daringly applied. Dr. Charles T. Jackson also made a telegraphic instrument.

I was led into error by that frequent fault of *knowing a thing too well.* Having been made familiar with the events related by the conversation of persons who lived at that time, I became entirely too confident of the accuracy of my knowledge of facts.

I have recognized grave errors and misleading statements in medical journals, but disliked to suggest their correction. Feeling grateful to those who take pains to rectify my errors, I shall in future try to call attention to mistakes worthy of notice. JAMES ROBIE WOOD.

BIBLIOGRAPHICAL.

Archives of Clinical Skiagraphy. By Sidney Rowland, B. A., Camb., Late Scholar of Downing College, Cambridge, and Shuter Scholar of St. Bartholomew's Hospital; Special Commissioner to *British Medical Journal* for Investigation of the Applications of the New Photography to Medicine and Surgery. A series of collotype illustrations, with descriptive text, illustrating applications of the new photography to medicine and surgery. London: The Rebman Pub. Co. Philadelphia: W. B. Saunders. Monthly.

The object of this publication is to put on record in permanent form for practical use some of the more striking applications of the new photography adapted to the practice of medicine and surgery. Each part contains several photographs of interesting cases, with descriptive text. The work will be of interest not only to surgeons, but to all diagnosticians, and will find a permanent place in our serial literature, no doubt.

The Medical and Surgical Uses of Electricity. By A. D. Rockwell, A.M., M.D., formerly Professor of Electro-Therapeutics in the New York Post-Graduate School and Hospital; Fellow of the New York Academy of Medicine; Member of the American Academy of Medicine; Member of the New York Neurological Society; formerly Electro-Therapeutist to the Woman's Hospital in the State of New York, etc. Illustrated with 200 engravings. New edition. New York: Wm. Wood & Co., 1896; pp. 612.

This work is practically the ninth edition of Beard & Rockwell's well-known "Treatise on the Medical and Surgical Uses of Electricity," but as the late Dr. Beard has had nothing to do with the issue since the second edition, it is proper that the responsibility should rest with Dr. Rockwell, who is the real author.

The book has been thoroughly revised and much of it re-written, the illustrations are new, and the whole text brought down to the present.

A chapter is devoted to the Rontgen or X-rays, and the subject of static electricity has been re-considered.

The work should be denominated classical and standard.

A Text-Book of Histology, Descriptive and Practical, for the Use of Students. By Arthur Clarkson, M. B., C. M., Edinburgh, formerly Demonstrator of Physiology in the Owen's College, Manchester; late Demonstrator of Physiology in the Yorkshire College, Leeds. With 174 original colored illustrations. Philadelphia: W. B. Saunders, 1896; pp. 554; octavo.

The purpose of the author has been to furnish the student with both a descriptive and a practical work on this subject, in one volume, and he has accomplished his task in a most satisfactory manner. In order to make the text accord with his space, the writer has avoided disputed points and omitted references almost entirely. The aim has been to give only the real knowledge at hand, and not cumber the mind of the student with non-essentials. The book should be commended.

Water and Water Supplies. By John C. Thresh, D. Sc. (London); M. B. (Victoria); D. P. H. (Cambridge); Medical Officer of Health to the Essex County Council; Lecturer on "Public Health," Kings College, London; Editor of the *Journal of State Medicine*; Hon. Sec. Incorporated Society Medical Officers of Health; Fellow of the Institute of Chemistry; Member of the Society of Public Analysts, etc. London: The Rebman Publishing Co., 1896. Philadelphia: W. B. Saunders; pp. 438; 12mo.

The main object of this little book is to furnish information respecting the supply of pure water, and it contains sufficient detail to enable intelligent consideration of the subject.

A Treatise on Surgery. By American Authors. For students and practitioners of surgery and medicine. Edited by Roswell Park, A. M., M. D., Professor of the Principles and Practice of Surgery and of Clinical Surgery in the Medical Department of the University of Buffalo, Buffalo, N. Y.; Member of the Congress of German Surgeons; Fellow of the American Surgical Association; Ex-President Medical Society of the State of New York; Surgeon to the Buffalo General Hospital, etc. Volume I., General Surgery. With 356 engravings and 21 full-page plates in colors and monochrome. Lea Brothers & Co., Philadelphia and New York; 1896; pp. 800.

In preparing this new treatise on surgery, the editor assumed that the surest method of securing success in his undertaking was to obtain the collaboration of those who unite the qualifications of teachers with clinical experience, and to that end the names of some of the most distinguished surgeons in the country appear in the list of contributors. The advance in the science and art of which this book treats, has satisfied the editor that a departure from tradition in respect to the treatment of certain topics was advisable, and hence it will be found essentially new. As an instance, the distinction maintained between hyperæmia and inflammation (*i. e.* infection).

We also find discussed subjects which have not been included in works of this class, such as surgical pathology of the blood, etc.

Bacteriology receives the attention its importance demands, and nearly every page will be found impressed with its teachings.

All the subjects are treated from the advanced standpoint of the American surgeon of to-day.

This volume contains the more general subjects of surgical pathology, the general principles and theory of surgery and the surgery of the tissues and tissue systems, the particular applications of general surgery to the surgery of regions and organs being reserved for the second volume.

The illustrations, which are profuse, have been prepared in the main expressly for this work, and colored plates have been utilized whenever necessary to elucidate the text.

The work is both classical and practical, while the physical part is all that could be desired.

A Text Book of Diseases of the Nose and Throat. By Francke Huntington Bosworth, A. B., Cantab., A. M., M. D., Professor of Diseases of the Throat in Bellevue Hospital Medical College, New York; Consulting Laryngologist to the Presbyterian and St. Vincent Hospitals, New York; Honorary Fellow of the British Otological, Laryngological and Rhinological Association; Corresponding Member of the Société Francaise D' Otologie et de Laryngologie; Fellow of the American Laryngological Association, the Academy of Medicine, New York; Member of the Medical Society of the State of New York, and of the Medical Society of the County of New York, etc. Illustrated with 186 engravings. New York: Wm. Wood & Co., 1896; pp. 814, octavo.

The book before us is a condensation of the author's larger work which was issued in two volumes, which has been considered too voluminous for students and general practitioners.

The text will be found sufficiently exhaustive for practical purposes by those for whom it is intended. The work is all that could be desired from a literary and scientific standpoint.

Minor Surgery and Bandaging. By Henry H. Wharton, M. D. Lea Brothers & Co.; 1896.

The third edition of this excellent work has been thoroughly revised, with the addition of numerous illustrations, containing the newest ideas and the most expert work. This volume will be most welcome, especially to physicians who have not had the opportunity to keep pace with the progress of the times.

A MANUAL OF VENEREAL DISEASES. By James R. Hayden, M.D., Chief of Venereal Clinic at the College of Physicians and Surgeons (Columbia University), New York; Professor of Genito-Urinary and Venereal Diseases in the Medical Department of the University of Vermont; Visiting Surgeon to the New York City Hospital. With forty-seven illustrations· Lea Bros. & Co., New York and Philadelphia, 1896; pp. 267; 8vo.

The author has attempted to give in the volume before us in a concise form a practical statement of what is known of the three venereal diseases, gonorrhœa, chancroid and syphilis, including their complications and sequelæ. The book is really an epitome of Prof. R. W. Taylor's excellent work on this subject, and will be found a useful guide to students and practitioners.

DISEASES OF THE EYE. A Hand-Book of Ophthalmic Practice, for Students and Practitioners. By G. E. De Schweinitz, A. M., M. D., Professor of Ophthalmology in the Jefferson Medical College; Professor of Diseases of the Eye in the Philadelphia Polyclinic; Ophthalmologist to the Orthopædic Hospital and Infirmary for Nervous Diseases. With 256 illustrations and two chromo-lithographic plates. Second edition, thoroughly revised. Philadelphia: W. B. Saunders, 1896; pp. 680; octavo. Cloth, $4.

This excellent book has been most cordially received by the profession, and the present edition has not only received thorough revision, but much new matter has been added.

No better work can be found for the purposes intended, as it is practical, and the text is concisely and clearly stated.· The physical part is in Mr. Saunders' best style.

FOOD IN HEALTH AND DISEASE. By I. Burney Yeo, M.D., F. R. C. P., Examiner in Medicine at the Royal College of Physicians; Professor of Clinical Therapeutics in Kings College, London, and Physician to Kings College Hospital. Author of "A Manual of Medical Treatment," etc. With illustrations. New and revised edition. Philadelphia: Lea Brothers & Co.; pp. 592; 12mo.

This little book, dealing with so important a subject as the nutrition of the human body, a subject which is being more and more appreciated by the profession, is an improvement over other editions, because more space is devoted to the diet in disease. The book is inexpensive, and should be in the hands of every student and practitioner as a ready hand-book, concise and practical.

A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS. By Roberts Bartholow, M. A., M. D., LL. D., Professor Emeritus of Materia Medica, General Therapeutics and Hygiene in the Jefferson Medical College of Philadelphia; Fellow of the College of Physicians, Member of the American Philosophical Society, Honorary Fellow of the Royal Medical Society of Edinburgh, Honorary Member of the Société Medico-Pratique de Paris, and of various National, State and County medical societies. Author of a "Treatise on the Practice of Medicine," of a "Treatise on Medical Electricity," of a "Manual of Hypodermic Medication," of the Russell and Jewett Prize Essays, and Prize Essays of the American Medical Association and of the Rhode Island Medical Society, etc. Ninth edition; revised and enlarged. New York: D. Appleton & Co., 1896; pp. 866; octavo.

This classical work, having reached its ninth edition, need be noticed only to announce a new and revised edition.

Forty-five pages have been added, and alterations are apparent at all points.

Suitable attention has been paid to the new synthetical remedies which organic chemistry has produced, according to the judgment of the author.

The high standing of the author as a teacher and practitioner is sufficient guarantee of his work, and we are glad to see that Prof. Bartholow has so far recovered his health as to be able to give us this revised work.

PTOMAINS, LEUCOMAINS, TOXINES AND ANTITOXINES, OR THE CHEMICAL FACTORS IN THE CAUSATION OF DISEASE. By Victor C. Vaughan, Ph. D., M. D., and Frederick G. Novy, Sc., M. D. Third edition. Lea, Brothers & Co.; 1896.

The subjects discussed in this volume are comparatively new, and yet their investigation has cast so much light upon the laws and prevention of disease as to render a third edition of this remarkable work a necessity.

A MANUAL OF PHARMACOLOGY AND THERAPEUTICS. By William Murrell, M.D., F. R. C. P., Physician to and Lecturer on Pharmacology and Therapeutics at the Westminster Hospital; Late Examiner in Materia Medica in the University of Edinburgh, and Examiner in Materia Medica and Pharmacy to the Conjoint Board of the Royal College of Surgeons of England, and the Royal College of Physicians of London. Revised by Frederick A. Castle, M.D., Member of the Committee for Revision and Publication of the Pharmacopœia of the United States of America; late Lecturer on Pharmacology at Bellevue Hospital Medical College; Physician to the Presbyterian Hospital; Editor of "New Remedies," etc. New York: William Wood & Co., 1896; pp. 516; octavo.

The book before us is intended as a student's text book, is an abstract of lectures delivered at the Westminster Hospital, and is adapted primarily to the requirements of students preparing for the examinations.

The reviser has adapted the text to American readers, and has added articles on climate and on mineral waters.

A PRACTICAL TREATISE ON MEDICAL DIAGNOSIS. By John H. Musser, M. D., of the University of Pennsylvania. Second edition; Lea Brothers: 1896.

Successful treatment is founded in a great measure upon actual knowledge of the real condition of the patient. In other words, as the author correctly states, the physician should never forget that his patient is a unit comprising closely connecting organs, and that the response to treatment will be satisfactory only in proportion to the condition of the entire system. In all cases it is important to determine what is organic and what functional, and the condition of all the organs. The author has been successful in presenting the subject of diagnosis in the clear language and with the abundant illustration to secure the very best possible results at the bedside. A careful study of this book will lead to a closer investigation and a more accurate knowledge of the real condition of the patient, and consequently better results in treatment.

PRACTICAL POINTS IN NURSING. By Emily A. M. Storey. Illustrated with seventy-three engravings and nine colored and half-tone plates. Philadelphia: W. B. Saunders.

The division of the text includes:

I. The nurse; her responsibilities, qualifications and equipment.

II. The sick room; its selection, preparation and management.

III. The patient; duties of the nurse in medical, surgical, obstetric and gynæcological cases.

IV. Nursing in accidents and emergencies.

V. Nursing in special medical cases.

VI. Nursing of the new born and sick children.

VII. Physiology and descriptive anatomy.

As a text-book for the training school and as a companion for the nurse in hospital, and especially in private nursing, we have seen nothing better. The appendix is of special value in its rules for feeding the sick, recipes for invalid food and beverages, and a glossary of medical terms and nursing treatment.

VEST POCKET MEDICAL DICTIONARY. Embracing Those Terms Which are Commonly Found in the Medical Literature of the Day, but Excluding the Names of Drugs and Many Special Anatomical Terms. By Albert H. Buck, M. D. New York: Wm. Ward & Co.

This is literally a vest pocket dictionary, but edited with such excellent judgment that it includes nearly all the current words, new and old.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

THIRD FRENCH CONGRESS OF MEDICINE

Serumtherapy of Variola.—M. Béclère completed the communication which he made last January to the Medical Society of the Hospitals upon the immunizing, preventive and curative action of the serum of inoculation, an action demonstrated by his experimental researches in conjunction with MM. Chambon and Si-Yres Ménard, and upon application of this serum to the treatment of variola. He briefly resumed his observations. numbering nineteen, and made at the hospitals of Paris and Marseilles. In adults, the total quantity of the injected serum generally varied between a litre to a litre and a half; twice it exceeded this dose and reached the figure of 1,600 cubic centimetres. The quantity received by young children varied from an eighth to half a litre, but the dose was stronger relatively to their weight. Two children were cured, one of twenty-one months, the other only twenty-six days, after receiving the twentieth of their weight of serum; a third, aged three months was cured after the administration of the twenty-fifth of its weight of serum. As respects adults, it is often very difficult to inject more than the fiftieth of their weight. In some emaciated subjects M. Béclère reached the thirty-third of their weight, but never exceeded this dose. These large quantities of serum, introduced into the subcutaneous cellular tissue, were rapidly absorbed, or more properly digested, without causing any other accident than the appearance, in certain cases, and from six to ten days after the injection, of a morbiliform eruption, sometimes accompanied with urticarial elevations, usually pale, rarely generalized, almost invariably apyretic, without general troubles, and always of short duration. The serum of the inoculated heifer, and also of the non-inoculated, seems to be tolerated better by the human organism than that of the horse. As regards the action of the serum of the inoculated heifer upon evolution of variola, M. Béclère awaits the collection of a larger number of observations, and the increase of the immunizing power of the serum, contenting himself for the present with showing that its application to the treatment of variola constitutes a rational and harmless medication.

The Transmission of Human Cancer to the Animal; Serotherapy of Cancer—M. Louis Dubois has investigated the production in an animal of a local reaction sufficient to allow him to suppose that the organism of the animal has been affected by the inoculated cancerous elements. For these inoculations he used cancerous fragments, and injected them into the cellular tissue. By this method he obtained many tumors, the largest of which weighed 570 grains. Three cases were treated by serum, one a non-ulcerated cancer of the breast, in which a cure, nearly complete, was obtained after fifteen days' treatment. The tumor was atrophied, and transformed into a small fibrous nodule. In the second case, an epithelioma of the forehead diminished and disappeared in thirty-five days. In these two cases from 2 to 5 c.c. of the serum were injected every third day in the neighborhood of the tumor, and also the injection into the tumor and its periphery of a few drops of slightly iodized alcohol. The third case, an ulcerated and malignant epithelioma of the upper lip, after twenty-three days showed only the arrest of its progress, but no tendency to cure. The serum seems to produce cure by a fibrous transformation. Its action is rendered more certain by its prompt employment, and presents no dangers except where there are extensive lesions. M. Bard did not believe in the reality of the cancer so obtained. He considered the tumors as simply inflammatory, and not genuine neoplasms, and hence the experiments were not conclusive.

Serotherapy and Diphtheria at Marseilles.—M. D'Astros, in charge of a laboratory for investigations of diphtheria, has made, from January 1, 1895, to July 1, 1896, 1,064 bacteriological examinations, of which the results are the following: Diphtheretic affections, pure or associated, of pure diphtheria, 399; diphtheria, with streptococcus, 89; with staphylococcus, 61; with coccus, 106; with different bacilli, 13; affections non-diphtheritic, 396. The mortality of the cases of diphtheria treated by the serum was 17.7 per cent. In 1895 the mortality in angina, without croup, was 13.8 per cent; croup, with or without angina, 36.8 per cent., and in the first twenty-four hours the deaths were respectively from 11.4 per cent. to 28.7 per cent.

Polyneuritis Grafted Upon a Nervous Diathesis.—Prof. Bernheim, of Nancy: The number of peripheral neurites has increased remarkably within a few years, doubtless because a more intelligent observation of them has caused them to be more thoroughly recognized. As we know, the majority of them are of toxic or infectious origin. On the one hand, lead, mercury, arsenic, alcohol, oxide of carbon, and on the other, diphtheria, the pyrexiæ, typhoid fever, pneumonia, influenza, syphilis, etc., by the toxines of their microbes. This year I have observed two cases of polyneuritis, with paralysis of the four limbs and polyneuritic psychosis, one developed during pregnancy, the other consecutive upon erysipelas. I have recently seen a polyneuresis of the four limbs, with total paralysis, in a young man of vigorous constitution, that supervened four days after the beginning of a seemingly mild influenza. But if mineral, vegetable or microbic poisoning seem to play a preponderating role in the genesis of peripheral polyneuritis, we should not lose sight of other etiological factors of this disease. Facts show that nervous emotions, neurasthenia, local hysteria, may engender various peripheral neurites. Observation: A young woman of twenty-nine years, nervous, impressionable, without any previous hysteria, entered my service on November 25, 1895, with paraplegia, muscular atrophy, paralytic club-foot—varus equinus—plantar grip of the toes, impossibility of replacing the right foot, slight mobility of the left, movements of the leg and thigh preserved, absence of electro-muscular contractility. The origin of the paralysis as follows: In July her daughter was the victim of violence. The patient was impressionable; no other special peculiarity. Two months after she was summoned to attend the court; there she became terrified and indignant on hearing the lawyer on the side of the accused. She subsequently became nervously exhausted, excitable and irritable, and after the lapse of fifteen days, she was taken with vomiting, chills, pains in the limbs, contraction of the right leg in the thigh, of the toes of the feet and the fingers on the hands. Vomiting continued for fifteen days, arrest of the menses for six months. The knee was restored to its proper position and kept so by splints, pains continued for two months, flexion of fingers relaxed, and all contraction disappeared. Peripheral paralysis persisted in legs and feet with abolition of reflexes. Regeneration began slowly; the paralytic varus equinus continued Observation: A young girl of twenty-one years, always nervous, impatient, has had several attacks of hysteria She entered hospital for nervous paraplegia; has not walked for five months; legs bend under her; violent pains in toes, calves, and weakness of limbs. Determining cause: She loved a young man whom her parents opposed; she became depressed, gloomy, melancholic, with general malaise, insomnia, profuse sweating, anorexia, cephalalgia, nocturnal agitation. This lasted for two months, when paralysis of the legs began, with pains in limbs. Believing this to be a case of hysterical paralysis, treatment by suggestion was tried, with the effect of rapidly removing the pains and enabling the patient to walk, but the deformity of the right leg and persistence of club foot—varus equinus—continued, and could not be corrected. There was also a notable atrophy of the muscles of the calf, particularly the right, with slight distortion of the left foot. The suggestion relieved the hysterical functional condition, but the peripheral progress continued to be rebellious to it. These observations present analogous etiological conditions. During full health a moral emotion supervenes, vivid, and followed by innervation and excessive excitability, lasting from fifteen days to several months, with cephalalgia, vomiting, suppression of the menses, etc. At the end of a few weeks polyneuritis appeared. It is incontestable that in these cases a violent moral emotion, by disturbing the nervous system, caused the neurites. Mazne concludes that they result from a dynamic commotion of the nerves, which have received a moral shock. The observations seem to show that such is the mechanism of these conditions. In the cases the polyneuritis was preceded for many weeks by general symptoms, depression, malaise, vomiting, chills, etc.; that is to say, there was probably a general infection, which preceded the localization upon the peripheral nerves. It seems legitimate to conclude that the nervous diathesis created a physical condition favorable to the development of a virulence of the otherwise harmless microbes of the organism, and polyneuritis resulted, an infectious polyneuritis, grafted upon a nervous or hysterical diathesis and created by it. "I have seen," said Prof. Bernheim, "in two instances a neurasthenia, probably infectious, complicated with diplopia, due to muscular neuritis of the eye, which continued for many months and was cured at the same time with the neurasthenia." We may then say that a nervous diathesis causes not only neurasthenia and hysteria, but also organic diseases of the nervous system.

Trophic Troubles of the Teeth, of Hysterical Origin.—M. Paul Sollier, of Paris: Hysteria, which can produce trophic troubles in the limbs, can also provoke them in the teeth. There is an atrophy of the teeth which begins by an erosion of the enamel, round in form, decreasing from the periphery to the center, where the dentine is exposed. When the enamel disappears the dentine, without dry or moist caries, becomes very pliable, disintegrated, eroded and gradually absorbed. The nerves are exposed and become very painful on slightest contact. The neck of the tooth is not attacked and the root still more rarely; it is only the body that becomes changed and disintegrated. This trophic trouble was observed in two cases in which there was an old hysterical anorexia with vomiting, which had lasted a long time, and had induced a generally unhealthy condition. The evolution was very rapid, and in a few months all the teeth were reduced to painful stumps which it was necessary to extract. The alveoli were healthy, but as soon as the enamel became affected the teeth decayed. Nothing would prevent the course of this trophic trouble, not even the amelioration nor the cure of the other hysterical phenomena. This was a genuine trophic trouble, for in the two cases the wisdom teeth seemed to be bare of enamel at certain points, which doubtless were not developed. There is only one possible intervention, and necessitated by the constant pain, which aggravates the nervous condition and the difficulty of nourishing the patient, who stands so much in need of alimentation, and that is the extraction of all the teeth and the application of an artificial apparatus.

Hematemesis in the Neurasthenic.—Dr. E. Ausset, of Lille: I report to this Congress a case analogous to those already presented in 1895, by M. Mesnard, of Bordeaux, to the Biological Society. It was that of a man of thirty-seven years, who had a first attack of hematemesis at the age of twenty-five years, while studying hard for an examination. In the month of March, 1896, there was a second vomiting of blood during a violent quarrel. The vomited blood was very red, but mixed with water and mucus, and uncoagulated at the end of two hours. It was syrupy and adhered slightly to the bottom of the vessel, and the total quantity of the liquid was about 200 grammes. Examination of all the organs presented nothing abnormal, except a slight dilatation of the stomach; reflexes normal; violent and frequent headache and scalp sensitive; frequent insomnia; nervous temperament and the least opposition frets him; memory intact. He is very anxious about his condition, and when interrogated, especially in relation to his digestive functions, there is a remarkable prolixity, and one sees that there is the sensitive point. He believes that he has a grave affection of the stomach, and is constantly concerned about the condition of his tongue. Besides the slight dilatation there is a sense of weight in the stomach, cramps after eating, eructation, no vomiting. Gastric chemistry shows the existence of a slight degree of hypochlorhydria, and that he has a nervo-motor dyspepsia in a mild form. Pulmonary tuberculosis, round ulcer and cancer being out of the question, it can only be a nervous hematemesis, not hysterical, since there is no sign of profound neurosis, but rather neurasthenic, as the majority of the classic indications of neurasthenia are observed.

Epileptiform Attacks and Uterine Fibroma.—M. Froelich reported a case in which there were typical crises of epilepsy, with biting of the tongue and involuntary evacution of the urine in a person of thirty years, at the same time with very abundant hemorrhage, due to uterine fibroma. For six years there was a parallel development of the fibroma and the hemorrhage and the number of epileptic attacks, in spite of the most active treatment with bromides. At forty years, the patient having reached the last degree of physical and moral cachexia, she was operated upon by abdominal hysterectomy, and the tumor weighed sixteen pounds. The pulse remained at forty-eight for two days after the operation, sequelæ normal. After the operation the attacks were much more frequent than before, thanks to a prediction made to the patient, by which she was greatly disturbed. Since six months she has often succeeded in preventing them by the force of volition. It is hoped that they will disappear finally and completely as soon the general health is improved. They are attributed—first, to the development of the tumor, and the resulting anæmia; second, to the gastric irritation produced by the ingestion of the large quantity of the bromide; third, to the nervous impressions produced upon the patient by these three causes. The first factor was removed by the operation and the other two ceased from the same cause. The progressive improvement seems to give reason for this interpretation. M. Bernheim has observed analogous facts, in which the epileptiform attacks were associated with inflammation of the genital organs. It is not essential that there should be albuminuria.

M. Vantrin: Sclero-cystic degeneration of the ovaries produces epileptic attacks. After the removal of the ovaries, or an operation upon the tubes, these accidents subside. They are the reflexes springing from the inflammation of the annexæ. There are nervous attacks, not always epileptiform; the removal of the ovaries is not always sufficient to destroy them, for we sometimes see mania or imbecility ensue. M. Crocq: An impression of peripheral origin may produce reactions of central origin. This case is an example. An inflammation may suffice; analagous attacks are seen to follow gastric affections. The experiments of Brown-Sequard, of cutting the sciatic and rendering rabbits epileptic, prove this, and it can only be considered as a reflex.

Anatomo-Pathological Contribution of the Medulla in Typhoid Fever.—M. Revinot, chief authority upon pathological anatomy of Nancy, says: I have examined ten medullæ of typhoid fever and their nervous branches, and have constantly found lesions affecting, first: The myelline, which sometimes disappears from the nerve tube, sometimes is reduced to a ring, to a crescent, to granulations situated between the neuroglia and the sheath of Schwann. Second: Affecting the axis-cylinder, which is often displaced and deformed. It is frequently swollen and even dissociated. Third: Affecting the nerve cells, their substance and prolongations. The neuroglia, conjunctive tissue and vessels present no lesions. Typhoid fever produces constant alterations of the medulla and its branches, the degree of which varies according to the case.

Treatment of Chlorosis by Ovarine.—MM. Spillmann and G. Etienne: The morbid phenomena that often precede menstruation may be considered as the result of a poisoning which disappears when the menses are established. The frequency of menstrual troubles in chlorosis is well known. The ovarian gland may be considered, First: As a gland having an external secretion, viz., the ovule. Second, As a gland charged with eliminating by the menstrual blood the excess of organic toxines. Third: Finally, as a gland provided with an internal secretion like the testicles, which plays an important role in general nutrition. If chlorosis is a disease of the ovaries, these three functions are modified or abolished, and with the suppression of menstruation there appears this special infection, chlorosis. *Per contra*, a general unhealthy condition intervenes in its turn, preventing the cure of the ovarian gland. By giving to the organism, in some way, the product of internal ovarian secretion, perhaps the infection may be arrested, and by acting upon the general organism produce the cure of the local ovarian affection. Three products were employed, viz., fresh ovaries of the sheep, dried ovarian powder and ovarian juice, prepared by the method of Brown-Sequard-De Arsonval. Experiments were made on six chlorotics, and all experienced great pain at first, localized particularly in the lower abdominal region, with headache and wandering muscular pains. In two of the patients the temperature ran up to 37.8° and 38°; pulse, 75 to 100. In three of them the results were clearly favorable, the general condition improved rapidly, pallor diminished, number of white globules increased, and strength returned. The menses, suppressed for three or four months, reappeared fifteen days after the beginning of the treatment in one patient, and at the end of three months in another. In the treatment of chlorosis, ovarine, by promoting the elimination of the toxines, and by introducing an anti-toxic principle into the organism, seems to have a favorable action upon the general condition, upon the augmentation of the number of globules, and upon the re-establishment of menstruation.

Treatment of Rheumatism by Local Applications of the Salicylate of Methyl.—MM. Lannois and Linossier, of Lyons, recalled the fact that they were the first to propose the local application of the salicylate of methyl, and to point out the value of this treatment in articular rheumatism. In their first communication they had especially in view the theory relative to the absorption by the skin of medicines that possess the power of emitting vapors at a low temperature. The salicylate of methyl has been employed by them clinically in different cases of rheumatism—acute, subacute, deforming, blennorhagic—and in other cases of peripheral pain—neuralgia, neurites of the tuberculous, etc. In all these cases it has a manifest action upon pain, which it causes to disappear for a longer or shorter period, according to the case, and effects the cure in a few days. It should be employed in those cases in which, for some reason or other, it is desirable to obtain a local action, and when the usual remedies for rheumatism are not tolerated by the stomach. It acts well in acute articular rheumatism, but it should not be employed, because of the difficulties of its application to very painful articulations, except when internal medication has failed. On the contrary, in sub-acute and chronic forms, and in the painful attacks which occur now and then in the different varieties of deforming rheumatism, the local absorption of the salicylate of methyl acts as well as by the buccal absorption of salicylated remedies, and is often superior to it.

The Diagnostic Value of Lumbar Puncture; Comparative Examination, from a Bacterioscopic and Chemical Point of View, of the Cephalo-Rachidian Fluid.—MM. Denigues and Sabbazes, of Bordeaux: In fourteen cases the puncture was negative, in eight cases positive. The positive cases embraced six acute tubercular meningites, one case of epilepsy, one of hydrophobia. In the cases of meningitis the fluid was drawn in six out of seven. In two cases of chronic meningitis it did not flow; one was verified by autopsy, the other by the reaction of tuberculine. The flow is always intermittent, generally rapid, exceptionally slow, as in Observation IX. The quantity extracted varied from 1, 11, 14, 15, 32, 40, 100, 102 c.c. Immediately after the puncture, in a case of tubercular meningitis, in which the extracted fluid was 40 c.c., there was observed a thermic ascension of a degree, 39° instead of 38°, an increase in the number of respiratory movements—64 to 76 per minute, Cheyne-Stokes—and a slight acceleration of the pulse. The fluid was always colored, and sometimes sanguinolent—observation 3 and 4 in meningites, may in other cases, hydrophobia, for example—pass through the canula clear as crystal. Bacterioscopic examination of the deposit was always made at once, after centrifugation. Three times Koch's bacilli were extremely numerous, intra and extra-cellular. In the deposit were found, besides some hematines, mono and polynuclear leucocytes, and even giant cells. In one case the search for bacilli and the inoculation were negative, although sections of the tubercular cerebral meninges had shown tubercular bacilli. An injection under the dura mater of a dog, of the cephalo-rachidian fluid, taken by lumbar puncture during life from a case of human hydrophobia, was followed by furious hydrophobia two months after the inoculation. A rabbit was inoculated with a preparation made from the bulb of this animal, and hydrophobic paralysis was produced fifteen days after the inoculation. It was interesting to submit to chemical analysis, comparative and complete, the cephalo-rachidian fluid. Five cases of tubercular meningitis and one of human hydrophobia served for this examination.

In cases of acute tubercular meningitis the centrifugal cephalo-rachidian liquid contains many organic principles—2.33 to 2.55 gr. per litre. In one case these principles were decomposed into serine, 2.10 gr.; peptones 0 gr. 10, urea, 0 gr. 35. Chemical analysis of the cephalo-rachidian fluid of hydrophobia differs very notably from that observed in tubercular meningitis. Its density is less, there is not more than 0 gr. 20 of serine per litre. On the contrary, the reduced substances correspond to 0 gr. 72 of glucose. The chlorates are more abundant, 6 gr. 90, instead of 5 gr.; also carbonates, phosphates and sulphates. By pursuing these researches perhaps an analytical formula may be found of the cephalo-rachidian fluid corresponding to each type of meningo-cerebro-spinal infection.

Treatment of Arthritic Diabetes by the Dosage of Alimentation.—M. E. Maurel: Clinical observation and experimental researches having led Dr. Maurel to consider excess of alimentation as the most important cause of arthritic diabetes, he desired to submit this opinion to clinical proof. If, in effect, this hypothesis be exact, he ought to be able to modify, and perhaps ameliorate, the diabetes by restoring the alimentation to a normal condition without being obliged to restrict the patient to an exclusive regimen. The results have exceeded his expectations, and Dr. Maurel cites sixteen cases of diabetes treated by this method, ten of which were cured and six were greatly improved. Of these cases fourteen were his own and two were reported to him by Dr. Baillac, Chief of Medical Clinic at Toulouse. He adds that by the term improvement or amelioration he does not mean only the diminution or the disappearance of the sugar, but also of all the other symptoms of diabetes. Besides, Dr. Maurel has applied these ideas to other forms of arthritism, and with the same result. During six years he has treated in this way 160 cases of arthritism, and all were cured, or notably ameliorated. The forms he has most frequently relieved are gravel, obesity, diabetes, arthritic albuminuria, seborrhœa and the mucous hyper-secretions of gout. Dr. Maurel bases the regulation of his system of alimentation upon the facts which he made known to the Congress for the Advancement of Science of Bordeaux in 1895, and which he rapidly recalled. The importance of these ideas does not consist in their application to the treatment of diabetes alone, but to numerous other arthritic forms of disease, and to the light they may be able to throw upon the obscure pathogenesis of this group of affections.

Upon Pleuritic Auscultation.—M. Hervouet: It is generally supposed that the sound of the pleuritic souffle and the egophony are produced by the presence of an effusion into the pleura, and it is explained by the change in the consistence of the compressed pulmonary tissue. If that were truly so, the souffle would be constant in pleurisy, which is not the fact. Many cases are completely evolved without being accompanied by this stethoscopic phenomenon, whatever the quantity of the effused fluid may be. Moreover, the presence of the fluid, by forcing back the lung, is incapable of really modifying its consistence. It must then be admitted that when there is a bruit de souffle—bellows sound—it is produced by a subjacent and independent pulmonary alteration. Tuberculosis, pneumonia, different broncho-pneumonia thus occasion a tubar souffle which assumes a peculiar quality of sound because it is transmitted to the ear by a fluid medium. The same reasoning applies to the egophony, which is as inconstant as the souffle. Conclusion: The pleuritic souffle and egophony do not inform us as to the condition of the pleura, but to that of the lung.

Addison's Disease, With Absence of the Supra-Renal Capsules.—M. A. Rispal, of Toulouse: The observations of Addison's disease, with the absence of the supra-renal capsules, as proved by autopsy, are regarded as entirely exceptional. Despite our researches, we have been able to collect only two cases of this kind, one belonging to Fletcher, the other to Ken-Spencer. It has also been our good fortune to observe a third case, of which we here give a complete anatomical and clinical report. It occurred in a young man of twenty-four years, who, without any pathological antecedent or any known cause, was attacked by Addison's disease—cutaneous and mucous melanodermia—pain, emaciation, progressive cachexia and asthenia, and gastro-intestinal troubles, terminating in death at the end of ten months. Contrary to our expectation the autopsy revealed not only the absence of every tubercular visceral lesion, but especially the non-existence of the two supra-renal capsules, perfect integrity of the bronchiæ and of the ganglia of the abdominal sympathetic nervous system. We do not propose to make any pathogenic deduction from a single fact, especially one so exceptional. We desire only to draw attention to a new observation of Addison's disease, with the congenital absence of the supra-renal capsules.

Diseases Whose Pathogenic Agent is Known.—1. Charbon: A. Behring has the merit of having demonstrated the bactericidal power of the blood of the rat. Orgata discovered the same of the frog. Metchnikoff and Roux reviewed the experiments of Behring, and concluded from their own experiments that the serum of the rat exercises a direct bactericidal action. Sclaro and Marchoux made experiments with the serum of inoculated animals. Paue and Travaux have reviewed the same, but the results obtained are as yet not encouraging.

2. Cholera: In 1892 Lazarus proved that the blood of patients cured of cholera had immunizing properties. Pfeiffer and Isaaeff succeeded in obtaining very efficacious serums, but only against the peritonitis that the microbe of cholera sometimes causes. Ransom, instead of immunizing his animals with cultures of the vibriones, as Pfeiffer and Isaaeff did, used toxines. His experimental results were very favorable, and tend to induce the belief that clinical researches will give the same results.

3. Coli bacillosus: The bacterium coli, which causes so many infections, seems as though it may be rendered impotent by appropriate serums, if we may credit the experiments of Demel and Orlandi, Salvati and Gaetano, Albarran and Mosny. From the analogies of the coli-bacillus and the bacillus of Eberth, Sanarelli obtained a reciprocal action of the true bacilli. From a serotherapeutic point of view, Loeffler and Abel have proved that if the serums of coli-bacillosus act upon typhoidal infections and reciprocally, each kind has an action more marked upon the special microbe from which it is derived.

4. Diphtheria: Fraenkel submitted cultures of the microbe of this disease to a temperature of 90° to 100°, but the results were not encouraging. It is well-known how Behring found the means of immunizing animals, and recognized the therapeutic value of the serum. Henoch, who published in 1892 the first statistics of the results obtained by this process, was not satisfactory. Roux, Martin and Chaillon, after perfecting the methods of Behring, published at the Congress of Budapest, in 1894, the first statistics with very favorable results, and based upon a great number of cases. Indiscriminate use of anti-diphtheritic serum is not advisable. In doubtful cases clinical signs should be considered, and a bacteriological examination should always precede the injection of the serum; it is always useful and aids in making the prognosis. In effect, it is established that in cases of diphtheria with microbic association, the serum acts less actively. The analogy of the bacillus, which, according to Belfanti and Della Vedora, causes ozena, with that of diphtheria, has induced bacteriologists to try the cure of this disease by injections of anti-diphtheritic serum, but the results were doubtful.

5. Disease of pneumococcic origin has been made the subject of the researches of Foa, Klemperer, Roger, Charrin, etc. In a case of acute meningitis, Righi obtained a cure in eight days, and though an isolated case, is encouraging. The proteo bacillosus of Nittis and the pyocyano-bacillosus—Richet, Hericourt, Behring, Bouchard—while not holding a prominent place in human pathology, have given interesting experiences in the laboratory.

6. Staphylococcy has also afforded serotherapic interest to Hericourt and Richet, Rodet and Courmont, Viquerat, Rose, etc., but not conclusive.

7. Streptococcy yields more satisfactory results. Immunization of animals was made in three forms: 1. Vaccination with living cultures—Lingelsheim—attenuated by heat or by the addition of the tri-chloride of iodine. 2. By sterilized cultures, a process difficult of employment, because they contain two kinds of substances, some of them diminishing, others augmenting the resistance. 3. By mixed processes, which gave good results to Mironoff. Roger, in making his serum, immunized his animals by injection of streptococcic cultures sterilized by heat and reduced to one-sixth of their volume. Vinoy used filtered cultures, Marmorek living cultures of the steptococcus of excessive virulence, one hundred milliardieme of a centimetre sufficing to kill a rabbit. The first applications to man were made by Gramakowsky. Since then Roger and Marmorek have made anti-streptococcic serotherapy common. Chantemesse published treatment of erysipelas by the serum of Marmorek, but it was disputed by Bolognesi. Obstetricians have obtained unexpected cures of puerperal fever. But there will always be partial checks to streptococcic infections because of the frequent microbic associations that accompany them, though Parascandolo succeeded in obtaining a therapeutic serum from many associated microbes.

8. Tetanus: Behring and Kitasato discovered the anti-toxic serum of tetanus. It is preventive and harmless, and can be employed by injection—Roux, Vaillard and Nocard.

9. Tuberculosis: Richet and Hericourt made the first applications of serotherapy to tuberculosis by transfusion of the blood of the dog, but this method, like many others, was abandoned. The trials of immunization of animals for tuberculosis were more difficult than for other diseases, thus impeding effective results. Koch still holds to immunization by tuberculine. The researches are based upon three groups of methods for obtaining the immunization of animals: 1st. The employment of living cultures. 2d. That of sterilized cultures. 3d. Mixed methods. Maragliano observed that tuberculous cultures contained two kinds of toxic substances, some which are of Koch's lymph, coming from the bacilli themselves, others consisting of toxalbumins that may be separated from the cultures by filtration. These last principles have an action absolutely contrary to that of Koch's lymph. Maragliano succeeded in obtaining his serum by injecting in progressive doses three parts of the first substances into one of the second, and at the end of six months he obtained his curative serum. This serum, in the doses indicated by him, is not dangerous, and appears to be of certain efficacy.

11. Typhoid fever: Chautemesse, Widal, Klemperer and Levy have made investigations of the serotherapy of dothineuteritis, but it would be rash to draw any positive conclusions because of the paucity of the facts. Infectious diseases, whose pathogenic agent is unknown—among these are some transmissible to animals. In hydrophobia Babes has demonstrated that the serum of animals that have been strongly immunized by the method of Pasteur is very useful, especially in urgent cases. Numerous ex-

periments have been made with vaccine and variolar virus. Beclerc, Chambou and Menard have established the therapeutic value of the serum of the inoculated heifer, but the applications of serotherapy to the variolous by Beclerc are not conclusive. Infectious diseases which are not transmissible to animals, viz., whooping cough, scarlatina, exanthematous typhus, rheumatism, have been the subjects of serotherapy, but we yet await results. As respects syphilis, this treatment is clearly inferior to the old treatment. In cancer, injection of the cancerous liquid in animals has given no results. The employment of a streptococcic serum, recommended by Emmerich and Scholl, should be abandoned. Delbet has recently isolated a special microbe of lymphadenoma, and has undertaken therapeutic experiments upon this subject.

Diseases Peculiar to Animals.—Serotherapeutic researches are also being actively made in veterinary medicine. Deutschmann has investigated serotherapy in symptomatic charbon; Silberschmidt, Metchnikoff, Lorenz, have studied in swine plague, hog cholera, pneumo-enteritis; Gamaleia, Behring and Nissen, in aviary septicæmia; Duclert and Cadiot in diseases of dogs and other animals, the pathogenic agent of which is unknown.

Serotherapy in Poisons.—This method has not only given results in poisoning by microbic toxines. Erlich applied it successfully against vegetable toxalbumens, and succeeded in destroying the action of abrine and ricine. The experiments of Roger upon strychnine and nicotine, of Calmette upon oubaine and strychnine gave negative results. Fubini obtained success upon the salts of morphine, and finally Phisalix and Bertrand procured anti-venomous serums against the bite of serpents. They have already been used successfully in man at Saigon by Lepinay.

Accidents Due to Serotherapy.—These consist of cutaneous manifestations. Among them abscesses are observed from streptococcic serum taken from animals immunized by living cultures. The exanthemata are not rare. They consist of polymorphous erythemata, scarlatiniform rubeoliform or urticaria. Forms of arthropathy are marked by œdema of the feet and hands, among the general troubles. Variot insists upon fever. Modifications of the urine under the influence of serum are very important. Besides polyuria, the decrease of the chlorides, increase of urea and the phosphates which are observed after all the injections of the serum, albumin, hemorrhages and nephrites also occur. Some attribute these accidents to a secondary infection; others pretend that the serum reveals a latent or old affection of the kidneys. Generally speaking, these post-serotherapic accidents are not serious, and generalized hemorrhages, due to a modification of the blood, may also be observed. Zagari and Calabrer have noted a diminution of hematine and of its richness in hæmoglobine. Dysenteriform diarrhœa, adenopathies, swelling of the spleen and cardiac troubles are sometimes seen. But these accidents are exceptional and do not lessen the value of the method. Instead of being produced by the influence of the antitoxine they result from the serum itself. Sevestre attribute them to secondary streptococcic infection; many incline to impute them to the albuminoid matter of the serum.

Mode of Action of Therapeutic Serum.—It is difficult to give an explanation of the mode of action of the serums. For a long time the bactericidal properties of the serum of the blood were not known. It has been incontestably proved that these properties increase in inoculated animals. Moreover, the serums modify the morphology of the microbes, and have upon them a curious action which consists in agglomerating them, and compelling them to become agglutinated by means, perhaps, of a special hypothetic substance, which Gruber calls glabrine and glabrificine. This substance modifies the microbe, and renders it permeable to alexines and to non-specific bactericidal substances which produce lesions of the bacterial protoplasm. Heating to 70° causes these properties of the serum to disappear. Pfeiffer explains the destruction of the rod bacilli injected into the peritoneum of inoculated guinea pigs by the bactericidal action of the products secreted by the cells of the serous membrane. Metchnikoff does not deny the phenomenon observed by Pfeiffer, but attributes it to the action of the principles that have escaped from dead leucocytes. Be that as it may, the serum has a manifest action upon the functions of the microbe, whose virulence it attenuates. Not only so, but when the humors of the blood have produced a sufficient modification of the microbe, the leucocytes intervene and phagocytosis results from the stimulation of the phagocytes by the inoculated serum. The antitoxine property of the serum is still more difficult of explanation. Behring considers to antitoxine as a simple neutralizant of the toxine, as for example, a base neutralizing an acid. But it is demonstrated—Buchner—that this phenomenon is not real, that the antitoxine does not act upon the toxine, but rather upon the organism itself, putting the cells into a condition which protects them from being influenced by toxine.

Conclusions: Up to the present time the treatment of diphtheria alone has undoubtedly been benefited by serotherapy. Despite the satisfaction that serotherapy gives, old therapeutic methods should not be disdained. In a woman affected with puerperal fever, for example, we should not neglect curettage, ultra-uterine lavage, etc.

Finally, not to prejudge the future, serotherapy will not completely overturn the art of healing. Clinicians should fix the indications, and associate other processes with it. Experimenters will perfect and purify the serums; every discovery in this direction and every progress will be a new result acquired for the relief of humanity.

ACADEMY OF SCIENCES.

Upon the Presence in the Superior Laryngeal Nerve of, Vaso-Dilator and Secretory Fibers of the Mucous Membrane of the Larynx.—By exciting the peripheral end of the superior laryngeal nerve in a dog that had been curarized and subjected to artificial respiration, M. Hedon observed that the mucous membrane of the larynx, particularly in the arytenoid region, became vividly red. At the same time drops of mucus exuded from the orifices of the glands, and united in a viscous layer all over the mucous surface corresponding to the side where the excitation was produced, the opposite side remaining dry. From this result the superior laryngeal may be considered as a vaso-dilator and secretory nerve for the mucous membrane of the larynx, as the chorda tympani is for the submaxillary gland.

Treatment of Experimental Colibacillar Infections by Large Intravenous Injections of Simple Saline Solutions and Their Mode of Action.—MM. Bosc and Vedel have obtained, by intravenous injections of saline solutions—Na Cl, 7 per 1 000—the cure of dogs that had been infected by cultures of colibacillus. These injections act by promoting the elimination of the poison, due to the osmotic action of Na Cl, and its direct and indirect diuretic action, by rehabilitating the altered red globules, by stimulating the movements of nutrition and by diminishing the globulicide power of the pathological serum. They also determine immediate reflex vaso-constriction, which prevents the great and forcible vaso-dilatation produced by the inoculation of the colibacillus.

ACADEMY OF MEDICINE.

Radiographs of a Case of Leprosy.—M. Berger presented radiographs made by M. Lardy, surgeon, of Constantinople, of the hands of patients affected with ainhum, which is a variety of leprosy.

Cranial Radiography.—M. Reney exhibited a radiograph that had been obtained after a sitting of seven hours, of a living subject who had received a projectile in the right temple. The situation of the projectile was clearly determined to be upon the optic nerves.

The Future of Carrier Pigeons, and Country Medical Practice.—In Scotland there is a physician, Dr. Harrey, who has a very extensive practice, and some of his patients are remote from his residence. It is his custom each day to carry with him several carrier pigeons, and in an urgent case he releases one of them with a prescription attached to it. As soon as the pigeon reaches the doctor's residence his servant looks under the wing, and immediately takes the prescription to the druggist, and dispatches it back to the patient by the same way that it came. Dr. Harrey is also accustomed to leave one or more of the birds with patients whose condition may become suddenly aggravated. In a case of urgency the pigeon is dispatched, and the doctor immediately responds.—*Gaz. Med. de Liege.* J. A. C.

TRANSLATIONS, GLEANINGS, Etc.

A New and Distinguishing Sign of Latent Aneurism of the Aorta.—This sign, according to W. C. Glasgow (*N. Y. Med. Jour*,. Sept. 15, 1894), is the presence of a systolic sound in the brachial artery, synchronous with the cardiac systole, and sometimes accompanied by an arterial murmur. When this sound can be heard, and aortic regurgitation can be excluded, a positive diagnosis of aneurism can be made, even in the absence of all other signs or symptoms. The sound is due to rapid tension of the walls of the only partially filled artery, due to the sudden impact of blood at the heart's systole. In pure aortic regurgitation the sign is always present; in two out of six of the reported cases of aneurism, the diagnosis was made from this sign alone, four months before the appearance of the recognized physical signs. In all six cases the systolic sound in the brachial artery was present; five were intrathoracic aneurisms and one abdominal.

An Easy and Ready Method of Circumcision.—John W. Ross, Surgeon U. S. Navy (retired), says in the *Medical Record*, Aug. 31, 1895: Retract the foreskin; insert the glans penis up to the corona into the open mouth of a glass test tube, draw the foreskin well forward over the end of the tube, tie a strong, small silk cord very tightly around the foreskin, immediately in front of the flange of the tube; amputate the foreskin one-eighth of an inch in front of the constricting cord by a circular sweep of the knife, unite the mucous and cutaneous edges of the stump of the prepuce by eight or ten fine interrupted sutures; cut the constricting cord, remove the tube, cover the cut edges well with powdered iodoform; encircle the anterior half of the penis with a roller bandage of iodoform gauze, allowing the meatus to project slightly for facility of urination without soiling or removing the dressing, and keep the patient in bed, with penis elevated, for from twenty-four to forty-eight hours.

Indications for Surgical Interference in Cases of Appendicitis.—Steele (*N. Amer. Practitioner*, quoted from *Matthew's Med. Quarterly*, April, 1895) reaches the following conclusions:

A differential diagnosis between appendicitis and typhlitis, perityphlitis, and paratyphlitis cannot be made with absolute certainty, but we remember that 91 per cent. of these cases are appendicitis. From fæcal impaction we differentiate by rectal examination, by colonic flushing, and by the administration of salines, aided also by the history and character of the pain present. From tubercular or malignant tumors, by the history. From ovarian or tubal disease, by the history and a careful examination, if necessary, under an anæsthetic. From extra-uterine pregnancy in the same way. From hematocele or intra-abdominal hemorrhage by the history and pallor, shock and varying line of dullness, with absence of temperature, and rapidity and feebleness of pulse.

Steele's ideas in regard to the indications for operation in appendicitis may be summarized as follows:

In cases where there is persistent pain, tenderness, temperature, increasing pulse, increasing tumor, and progression of the disease.

In all cases where pus is present.

In all cases where salines and flushing of the colon do not give prompt relief.

In recurring or relapsing cases in the interval following an attack.

Whenever the appendix is found diseased.

Whenever the appendix is found diseased during a laparotomy for any other condition, it should be removed at the same time.

Operate immediately in all perforative cases.

Operate in all gangrenous cases.

Operate early, and thus lower the mortality, which is less than 8 per cent. during the first week, and over 17 per cent. during the second week in cases operated upon.

Antagonism Between Morphine and Cocaine.—In an article contributed to the *Medical Record*, by Dr. Jos. W. Stickney, the author discusses the question of antagonism between the physiological effects of morphine and cocaine. His attention was called some time since to an apparent antidotal effect of opium in case of cocaine poisoning. The patient had taken 2 ounces of a 4 per cent. solution of cocaine in about two hours. Being unable to sleep and been very nervous after this large dose, he took about half an ounce of laudanum, which in the course of an hour relieved the nervousness and induced sleep. Except for some mental hebetude and a sense of muscular prostration, the patient was in fair condition all the next day—well enough to attend to his business. The author, believing this result could be explained only by the antidotal effect of the laudanum, instituted a number of experiments on animals and a few on man, the details of which are given in his paper; and the results confirmed his supposition as to the antagonism of the two agents. Dr. H. E. Matthews, who had assisted in the laboratory work, was called to a case of opium poisoning, in which he made a trial of cocaine as an antidote. A woman drank over 2 ounces of laudanum and was seen twenty minutes later, being then in a state of great excitement. Six grains of yellow sulphide of mercury were given, which caused vomiting of a clear fluid, which had neither the color nor odor of laudanum, so it was concluded that the poison had all been absorbed. The doctor then administered hypodermically one-half grain of cocaine (presumably one of its salts). The patient became more quiet and vigorous, and subsequently a quarter grain more was given. In an hour her condition was normal. Dr. Stickler concludes his paper as follows: "In any case of opium poisoning I would first employ an emetic; then I would give hypodermically one-fourth to one-half grain of cocaine; wait twenty minutes, and if no decided effect had been obtained I would give another injection of one-fourth grain; after waiting twenty minutes I would repeat the dose if there was no manifest improvement in the case. I think three separate doses of one-quarter grain each, at intervals of twenty minutes, is the best plan to follow, on account of the very quick diffusibility of the drug and its sustained effect. During this time I would administer coffee by mouth or rectum as a supplementary heart stimulant, and in extreme cases employ artificial respiration. While I urge this method, I hope with becoming deference to the opinions of others concerning other plans of treatment, I urge it with the honest conviction that it is an improvement upon the atropine and permanganate of potash methods."

Tendon Grafting.—A new operation for deformities following infantile paralysis, with report of a successful case. Dr. Saml. E. Milliken (*Medical Record*, October 26th) reports the case of a boy eleven years of age upon whom, twenty months before, he had successfully grafted part of the extensor tendon of the great toe into the tendon of the tibialis anticus muscle, the latter having been paralyzed since the child was eighteen months old.

The case which was presented showed the advantages of only taking part of the tendon of a healthy muscle, which was made to carry on the function of its paralyzed associate, without in any way interfering with its own work.

The brace, which had been worn since two years of age, was left off, the patient walked without a limp, the talipes valgus was entirely corrected, and the boy had become quite an expert on roller skates.

Dr. Milliken predicts a great field for tendon grafting in these otherwise hopeless cases of infantile paralysis, who heretofore have been doomed to the wearing of braces all their lives.

Hot Water in the Treatment of Herpes Circinatus.—Dr. J. Noir, a French physician (*Le Progres Medicale*), having a large number of cases of herpes circinatus under his care in idiotic and epileptic patients, had a good opportunity to test the efficiency of various methods of treatment. He found the methods ordinarily employed very unsatisfactory. A patient suffering from the disease was attacked with bronchial pneumonia He had a temperature of 102° F. for three weeks. One of the attendants contracted the disease in his right hand. On the patient's recovery it was found that the skin disease had disappeared, but the eruption upon the attendant's hand resisted every measure of treatment which was applied, including frequent applications of tincture of iodine and cauterization with nitric acid.

The disappearance of the disease in the patient suggested the application of heat as a means of combating it. The attendant's hand was accordingly treated with hot water at 50° C. (122° F.) After a few daily baths, the eruption disappeared. The same method was applied to two other nurses and forty-seven patients with equally good success.—*Mod. Med.*

Is There Any "Best" Time for Sleeping?—Dr. E. P Colby writes in the *New England Med. Gaz.*: Does the time at which the sleep is obtained, provided it is sufficient in amount, make any change in the result? In brief, is there any truth in the old adage that an hour before midnight is worth two hours after midnight? I had an opportunity to make some study of this subject in my naval service during the late war. On shipboard, as is undoubtedly known to most of you, the ship's company—officers and men alike—stand four hour watches day and night, and to get the required amount of rest are obliged to get their sleep irregularly; to so arrange it that the same man shall not be obliged to take early or late watches continuously, the "dog watch" of two hours is interpolated, thus adding to the irregularity. In watching the results for over two years I could never discover that the watch officers and the men were not as fully refreshed by their sleep as were the medical and pay officers, who stand no watch, and have hours as regular as those of any householder.

Composition of Expired Air and Its Effects Upon Animal Life.—The above subject was recently investigated at the Smithsonian Institution, under the provisions of the Hodgkins Fund (*Science*, May 3, 1895). The results obtained in this research indicate that in air expired by healthy mice, sparrows, rabbits, guinea pigs or men there is no peculiar organic matter which is poisonous to the animals mentioned (excluding man), or which tends to produce in these animals any special form of disease. The injurious effects observed of such air appear to be due entirely to the diminution of oxygen or the increase of carbonic acid, or to a combination of these two factors. They also make it very improbable that the minute quantity of organic matter contained in the air expired from human lungs has any deleterious influence upon men who inhale it in crowded rooms, and hence it is probably unnecessary to take this factor into account in providing for the ventilation of such rooms. Taken in connection with the results of other researches summarized in this report, they indicate, moreover, that some of the theories upon which modern systems of ventilation are based are either without foundation or doubtful, and that the problem of securing comfort and health in inhabited rooms requires the consideration of the best methods of preventing or disposing of dusts of various kinds, of properly regulating temperature and moisture, and of preventing the entrance of poisonous gases like carbonic oxide, derived from heating and lighting apparatus, rather than upon simply diluting the air to a certain standard of proportion of carbonic acid present. It would be very unwise to conclude, from the facts given in this report, that the standard of air supply for the ventilation of inhabited rooms, which standards are now generally accepted by sanitarians as the result of the work of Pettenkofer, De Chaumont and others, are much too large under any circumstances, or that the differences in health and vigor between those who spend the greater part of their lives in the open air of the country hills, and those who live in the city slums do not depend in any way upon the differences between the atmospheres of the two localities, except as regards the number and character of micro-organisms.

The cause of the unpleasant, musty odor which is perceptible to most persons on passing from the outer air into a crowded, unventilated room is unknown. It may in part be due to volatile products of decomposition, contained in expired air of persons having decayed teeth, foul mouths, or certain disorders of the digestive apparatus, and is due, in part, to volatile fatty acids produced from the excretions of the skin, and from clothing soiled with such excretions. It may produce nausea, and other disagreeable sensations, in especially susceptible persons, but most men soon become accustomed to it and cease to notice it, as they will do with regard to the odor of a smoking car or of a soap factory, after they have been for some time in the place. The direct and indirect effects of odors of various kinds upon the comfort and perhaps also upon the health of men, are more considerable than would be indicated by any tests now known for determining the nature and quantity of the matters which give rise to them.

Cases of fainting in crowded rooms usually occur in women, and are connected with defective respiratory action, due to tight lacing or other causes.

Other causes of discomfort in rooms heated by furnaces or by steam are excessive dryness of the air, and the presence of small quantities of carbonic oxide, of illuminating gas, and, possibly, of arsenic, derived from the coal used for heating.

Some Means Employed in Diagnosis and Cure of Gastric Affections.—Dr. Dujardin-Beaumetz, in *Lyon Medical*, says (*Med. Brief*). For the diagnosis of gastric affections, no better means is known than the morning test meal, which should always consist of the same food, taken at the same hour—slightly sweetened coffee (or tea) with milk, and one or two slices of bread, the quantity of liquid being always the same and not exceeding five hundred grammes.

If, three or four hours after ingestion, there is a sensation of heat in the stomach, a feeling of exaggerated acidity, we have to deal with a hyperacid dyspepsia.

If, on the other hand, there is an abundance of gas, a sensation of heaviness and fullness, and marked slowness of digestion, subacidity is the cause of the disturbance.

If pain commences after a quarter of an hour, increasing with time, there is probably irritation or inflammation of the duodenum, and in that case, gastro-duodenitis.

Finally, painful cramps and even vomiting may supervene, which in themselves, characterize the disturbance occasioned in the functions of the muscular and nervous centers of the stomach.

These indications are often more useful than the direct methods of analyzing the gastric juice.

In the real painful forms of dyspepsia, such as the gastralgia of chlorotic subjects, the painful crisis appears immediately after the ingestion of food.

Knowledge of the patient's profession and habits is another means of diagnosis.

Among the simple means calculated to cure gastric affections belongs decubitus on the right side during sleep, to promote the passage of food from the stomach to the duodenum.

Warm drinks diminish (according to Linossier) the secretion of the gastric juice, and augment gastric contractility. They are indicated, preferably slightly aromatized, in hyperchlorhydria, and in an indolent and dilated stomach, while very cool water (53 degrees F.) will exert a stimulating influence upon said secretion.

As alkaline waters in small doses, one-half to one hour before meals likewise excite this secretion, they, too, are indicated in hyperchlorhydria. They also promote the muscular movements of the stomach, resulting in a more rapid evacuation. In this case sodium bicarbonate or alkaline water should be taken during or after meals.

Massage is also one of the best means of combating indolence of the stomach and the stasis of food therein.

MOVING TOWARD THE LIGHT.

The modern developments in physiological chemistry and bacteriology, as well as the accumulated evidence of experience, has convinced the great majority of skilled and well-educated physicians in the ranks of Homœopaths, that the sectarian bounds of their school were too small for the exercise of the practice of rational medicine; and numerous attempts have been made to enlarge the boundaries set by Hahnemann, the founder of this school of medicine.

This movement has finally gained such proportions that there was recently organized at Buffalo a medical society known as the American Association of Physicians and Surgeons, made up of qualified members of the profession of different schools, the purpose of which is to break down the bars of sectarian medicine and make a platform large enough to admit any intelligent or qualified practitioner, irrespective of his sectarian antecedents. So far as its medical creed is concerned, the regular profession has long ago abandoned sectarianism, and ceased to subscribe to the principle of *contraria contraris curantur* attributed to it by Hahnemann.

We are glad to see this movement. It is in the right direction, and it is the sincere hope of the writer that some time in the future there may be only two recognized classes of physicians, *viz.*, those who are practicing medicine on a rational and physiological basis, and those who are pursuing blindly irrational methods.

The long fight among the different schools of medicine has been based upon differences of opinion upon the so-called action of drugs, but intelligent physicians are finding out (many long ago made the discovery) that in the relation of the human body and drugs, it is the cells of the body which are active, and not the drugs. The body acts upon the medicine, not the medicine upon the body. Modern developments in hydrotherapy, electrotherapy, massotherapy and the various branches of physiological medicine, including dietetics, have left comparatively little room for pharmaceutical products, so it is exceedingly foolish to still maintain the old quarrel about big doses and little doses, when doses of any sort have so small a part to play in the rational treatment of diseases. The high potency delusion seems about dead.—*Modern Medicine.*

IS INHERITED SYPHILIS CONTAGIOUS?

Dr. Robert W. Parker, after twenty years' experience at the East London Children's Hospital, has arrived at the following conclusions: 1. The children of syphilitic parents very frequently show manifestations of a disease which is almost universally called "inherited syphilis." 2. In a large proportion of cases this inherited disease is not syphilis at all, in that the disease is non-contagious, and would be better named "inherited from syphilis." 3. This inherited disease is true syphilis only if it conform to the ordinary tests which pertain to contact syphilis and prove to be infectious and contagious. 4. The children of syphilitic parents occasionally inherit syphilis. 5. The mother suckling a child with such a disease may be infected by it. 6. A healthy wet nurse and other persons brought into contact with such a child are even more liable to be infected by it than the mother. 7. Lymph taken from such a child, even although apparently well at the time, will probably, or possibly, invaccinate syphilis. 8. In reply to the question, Can a healthy woman give birth to a syphilitic child? the answer must be no. 9. Many women give birth to children who suffer from what is called "inherited syphilis," without themselves appearing to be infected. The explanation is obvious. This "inherited syphilis" is not syphilis in the true sense, and the mother's so-called escape depends on this fact. 10. There is no recent clinical evidence which fully realizes Colles' teachings, viz., a mother suckling her own syphilitic infant and escaping an infection to which a healthy wet nurse suckling the same infant, and other members of her family, who have merely handled this infant, have succumbed, the latter facts being essential, if only to establish the contagiousness of the infant's disease in any and every given case asserted to be "inherited syphilis."—*Edinburgh Medical Journal.*

MASTURBATION AND SPERMATORRHŒA.

I do not believe it safe for a physician to prescribe fornication. It is not safe nor curative, apart from the moral aspect of the matter. It has always struck me also as pretty small business, for a man to purposely select a wife to relieve him of the results of a weak will and vicious sensual indulgence. If marriage comes in the natural course of events, as it often does, so much the better. But to select a wife as a remedial agent for masturbation is unjust to the woman and a confession of moral and mental feebleness. Man is distinguished from the brute by his self-control. Let him bear the fact in mind and raise himself by a determined effort of the will. Pure thoughts and chaste associations, vigorous physical exercise, and a resolute effort to act a manly part will always be successful.—DR. CHARLES L. DANA, *Text-Book of Nervous Diseases*, p. 460.

Dr. George B. Fowler, Commissioner of Health, is doing some practical work in simplifying the certificate of death required by the Health Department, in the following proposed rules:

A. 1. The attending physician must furnish a certificate within thirty-six hours after death (Sanitary Code, Sec. 151).

2. All physicians practising in New York City (including those in public institutions) must be registered in the Bureau of Records (Sanitary Code. Sec. 5).

3. If a person dies from *criminal violence*, or *by a casualty*, or *suddenly while in apparent health*, or *when unattended by a physician*, or in prison, or in any *suspicious or unusual manner*, the case must be referred to the Coroner's office (Chap. 410, Sec. 1773, Laws of 1882).

4. Certificates *will be returned for additional information* which give any of the following diseases, without explanation, as the sole cause of death: *Abortion, child birth, gangrene, meningitis, necrosis, pyæmia, abscess, convulsions, gastritis, metritis, peritonitis, septicæmia, cellulitis, erysipelas, hemorrhage, miscarriage, phlebitis, tetanus.* (Any one of these may be the result of an injury and thus be a subject for investigation by a coroner. If it is not the certificate should make that fact plain.)

5. No certificate giving "*heart failure*," "*dropsy*," or other *mere symptom*, as the sole cause of death will be accepted unless accompanied by a satisfactory written explanation.

B. 1. No burial permit can be obtained without a proper certificate.

2. Certificates must be written throughout in black ink.

3. No certificate will be accepted which is *mutilated, illegible, inaccurate*, or any portion of which has been *erased, interlined, corrected or altered*, as all such changes impair its value as a public record.

The *Medical Century* of October 1st states that Dr. Fisher has been compelled to "retire temporarily" from the editorial chair on account of serious illness. Dr. William A. Smith, the new editor, states that "the editorial columns of the *Medical Century* having been consigned to my absolute control during Dr. Fisher's illness, they will voice my individual sentiments during that period."

The Berlin correspondent of the *Medical Press and Circular*, in his notes of the recent Jenner centennial celebration in Germany, records that Prof. Virchow, who opened the proceedings in the name of the committee of honor, said, in his address, that as an ethnologist he was compelled to mention an ethnologic fact in the history of protective vaccination: All the peoples that had not been reached by vaccination, or that had not accepted it, had disappeared from the face of the earth, destroyed by the smallpox.

MISCELLANY.

—Injections of warm water administered every morning for two or three days are said to be a positive cure for pin worms.

—It is proposed to endow a bed at Guy's Hospital to bear the name of the poet Keats, who was for a short time a medical student there.

—Our journals are crowded with essays on gynæcology, relating mostly to treatment. We suggest that writers give special attention to prevention.

—The University of Paris will hereafter require of foreigners the possession of a literary degree as a prerequisite to graduation from its medical department.

—To practice medicine in the Republic of Hawaii a license must be obtained from the Minister of the Interior, after having first passed the Board of Medical Examiners.

—Kellas concludes from his experiments that exhaled air contains more argon than before inhalation. From this he infers that it is an important element in the animal economy.

—Reckoning from the cessation of the last menses and the first feeling of life, Dr. Szaszy mentions a case in which gestation lasted 330 days. The child was normally developed.

—The Medical Society of Berne has inaugurated a plan for the suppression of press notices of suicides, as it has been observed that epidemics of suicide, so-called, come from suggestion, acquired through printed accounts of them.

—*Cleaning Rusty Instruments.*—Fill a vessel with a saturated solution of chloride of tin in distilled water. Immerse the rusty instruments and let them remain all night. Rub dry with chamois after rinsing with running water and they will be of a bright silvery whiteness.

—The military officers at Rennes (*Med. Press and Circular*) have recently suffered from a typhoid epidemic, which has been traeed to the ice which was used to cool the champagne at a banquet. The ice had been taken from a neighboring river at a point where the town sewer emptied.

—It is said that the chance of the patterns on the finger tips of two persons being alike is less than one in 64,000,000,000. The print of the thumb of the manufacturer is suggested as a good trade mark to be imprinted on each bottle of soothing syrup or corn salve, to insure its genuineness.

—The Convalescent Dinner Society is a London Association which undertakes the duty of granting in well-authenticated cases, in which sickness has reduced the strength necessary to return to work, an order for fourteen daily dinners. Such orders have been granted to nearly 1,000 convalescents during the past year.

—The *Deutsche Med. Woch.*, August 13th, brought actual photographs of the heads of a couple of Eulenberg's patients, in which the Röntgen ray discloses and locates a bullet inside the skull. The photograph was taken with the head of the patient resting on the plate holder, with the Crookes tube about 24c. above.

— The members of the Hempstead Medical Association, of Portsmouth, O., have decided to prepare a black list of all persons who refuse or deliberately neglect to pay physicians' bills. The arrangement was to go into effect October 1st, and medical treatment is to be refused to all persons whose names are on the list, unless paid for in advance.

—Wealth does not seem to figure very largely as a factor of longevity or as a preventive to suicide, as the Irish and Spanish centenarians—between whom there exist strong racial relationships—belong to nations who are about the poorest off in the whole of Europe, and yet furnish the smallest average rate of suicides and the greatest number of centenarians.

THE NEW PHONENDOSCOPE.

The newly invented phonendoscope is designed to be used by physicians and surgeons for detecting the presence of disease by sound.

The instrument consists of a circular flat metal box or tympanum, having on its one surface two apertures for the attachment of the rubber ear tubes, while the other surface is formed by a thin disk which is readily thrown into vibration. The best results are obtained by simply applying this disk to the surface to be examined. By an ingenious contrivance a second disk can be superposed upon this one, and a vulcanite rod attached to the former, so that the area of auscultation may be extremely circumscribed. The condition of the sounds is only slightly diminished by the use of the rod, which thus combines the principle of the solid stethoscope with that of the tympanum. The rod furnished with the instrument is about 2 inches in length, but it is stated that there are other rods of various lengths, to enable the "phonendoscopist" to receive sound vibrations from the natural cavities which communicate with the exterior of the body. Altogether, we consider the instrument highly ingenious, carefully and compactly constructed, useful as an aid to auscultation, and yet not likely to entirely supersede the use of the stethoscope. It may also be found useful in class demonstration, since it would be easy by means of branched tubes to enable several persons to listen at the same time.

The instrument would be particularly useful for the following purposes: (1) The sound of the respiratory organs, of the circulation of the blood and of the digestive organs in the healthy body, as well as in the sick subjects. (2) The sounds made by the muscles, joints and bones. (3) The sounds of the capillary circulation. (4) The slightest sounds produced in any diseased condition of the body; hence it is possible to draw on the body dimenmensions, the position or any alteration in the position of the various organs and of the fluids which have gathered in the most important cavities in the body. (5) The sounds in the eye, the ear, the bladder, the stomach and the intestines.—*Lancet.*

Prof. Augustin H. Goelet, of the New York School of Clinical Medicine (*Med. Record*) employs a knife of peculiar construction for denuding the lips of the cervix in the operation of trachelorrhaphy. He claims that the operation can be completed in one-half the time that is usually consumed when scissors are used for denuding, and that the surfaces to be approximated are more regular and even. With the knife each lip is denuded with one stroke, and no trimming is required afterwards to remove superfluous tissue. The knife, which is double-edged, pointed blade set at nearly right angle to a firm shaft and handle, is made to transfix the cervix beyond the plug of cicatricial tissue, and cuts as it is drawn downwards, making a clean denudation. For inserting the suture he employs a round, full, quarter-curved needle with a flat, spear-shaped point, which penetrates the dense cervical tissue with ease and never breaks. For suture material he uses silver wire or silkworm gut only, believing that catgut or any other suture which is not absolutely impervious should not be used in the cervix. The chief advantage of silver wire and silkworm gut is that the sutures may be left in the cervix for any length of time until complete union has taken place. Catgut absorbs or loosens too soon, and is liable to absorb septic matter from the vagina and convey it along the suture track. Fine chromatized catgut may be used for superficial auxiliary sutures.

OBITUARY.

Sir John Eric Erichson, the distinguished English surgeon, whose work on surgery was for many years a text-book in our leading schools, died in Folkstone in September, of apoplexy, at the age of seventy-eight years.

New York Medical Times

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ORIGINAL ARTICLES.

EXOPHTHALMIC GOITRE.

By W. O. Davies, M. D., Wilkesbarre, Pa.

WITH the introduction in recent years of thyroid feeding, the use of the animal extracts, antitoxin, etc., for the cure and prevention of certain diseases, those affections to which this form of therapy applies have received especial attention. Among them may be named in this relation Graves' disease, called also exophthalmic goitre and Basedow's disease.

A young practitioner is always limited in his selection of a subject in which he can bring any personal experience into the essay. One of the first cases that I was called to see in beginning practice was one of exophthalmic goitre, and since that time I have had the opportunity of studying several more, at a time when they proved especially interesting to me. Being aware that a number of cases have been observed by members of this Society, my desire is to elicit their views and experience with the disease, and become thoroughly acquainted with it.

The first authentic record of exophthalmic goitre was discovered by S. Wickham Legg, in St. Bartholomew's reports, in which Caleb Hiller Parry, of England, describes a case in 1786. Latterly we have descriptions by Flajarni, in 1802, and Demours in 1818. In 1835, Graves, of England, published an account of these cases, and in 1840 von Basedow, of Germany, gave an account of the disease. The Germans named it after Basedow and the French after Graves. After studying some of the many theories advanced as the causation of this affection, we are only impressed with the mystery with which its etiology is surrounded. Nevertheless, I think it would be proper and perhaps of some interest to give some of them, and if possible the more recent ones. An inherited nervous temperament undoubtedly predisposes to this disease, as well as to all neuroses. And, I think, under the etiology we may consider of importance heredity. In one of my cases the family history was affirmative in this respect. The mother had exophthalmic goitre, and previously she had always been quite nervous, as well as her brothers and sisters. One of her children had defective speech, and a daughter, about sixteen years of age, had tachycardia, and other manifestations of a weakened nervous system. In referring to the authorities in this connection, Dr. Curtin, of Philadelphia, in his investigations supporting this view, reports much interesting evidence. In one family three sisters, the only children, aged six, ten and twelve respectively, had unmistakable signs of this disorder. Their mother had palpitation and enlarged thyroid at eight years, and her sister the same at twenty-two, making five cases in this family that presumably were affected by the same disease. He cites a great many cases from other physicians, among them Dr. H. C. Wood, and J. Madison Taylor, of Philadelphia, and Dr. Guthrie, of this city. Dr. Frankel gives an account of a patient in whom evidences of heredity were extremely marked. The patient, a woman aged forty, had exophthalmus, tachycardia, struma, tremor of the hands, severe diarrhœa and premature occurrence of the menopause. The father and sister of the patient had well marked exophthalmic goitre, and two of the children died of severe mental trouble.

Women are affected much oftener than men. I think we can estimate the proportion from statistics at about 12 per cent. for men. Climate is undoubtedly an important factor, Curtin, in his observations, has noticed the large proportion of Germans and French and their descendants, visiting the University of Pennsylvania Dispensary, affected with this disease. These Germans and French were almost all from the provinces of Alsace and Lorraine, and many of the cases of the disease of persons born in the United States were of those whose ancestors were German or French from these same districts. It has been found that the atmosphere of elevated situations has a decided effect on the disease. A mountain residence for developed cases, or even for persons who have only a hereditary tendency, is not the best. Observations favor the argument that lowlands are better for patients with this disease. It may occur at any age from two to sixty, but mainly from twenty to forty. Ehrlich, in a study of the subject has discovered nineteen cases, Kronthal four, and with other writers making a total of twenty-six reported cases in children. Delicately built, hysterical women are particularly liable; also chlorotic and anæmic persons. Disorders of menstruation are found very often in the female patients. In mild cases the disease and symptoms are known to have disappeared when menstruation became regular. Exciting causes are exhausting influences, mental excitement and injuries, worry and fright. Dr. Henry Day, in the *Lancet*, claims the cause to be emotional, and the excitement of the nervous system carried to a pitch beyond what is natural or healthy will lead to disorder of one or more parts. He says the disease may begin suddenly or may have prodromata, such as feelings of languor and malassimilation.

There is a case recorded where all the symptoms appeared in one night. The three most characteristic symptoms usually appear in the order named:

1. Palpitation or rapid beating of the heart.
2. Enlargement of the thyroid gland.
3. Protrusion of the eyes.

Cases can go on without these three cardinal symptoms being developed. Dusch observed the cardiac phenomena absent about three times and goitre four times.

Hammond, in his work on nervous diseases, lays great stress on a fourth symptom, first discovered by Dr. Louis Fisk-Bryson, of New York, which consists in a gradual and steady decline in the expansion of the chest in forced inspiration. Prognosis can be somewhat determined by this symptom. The less the expansion the graver the disease. Pigmentation of skin is present to a greater or less extent in all cases of exophthalmic goitre. It is attributed to the influence of the sympathetic system. In the three cases in my experience this symptom was very marked, and one especially presented the appearance of a mulatto. Since recovery her complexion is very fair. Sometimes the pigmentation is confined to certain areas, around the eyeballs, nipples and abdomen. Drummond reports a case of such intense coloration as to be mistaken for Addison's disease. The heart generally presents the first symptom, beginning with attacks of palpitation, increasing in frequency, until it often reaches a steady pulsation of 150 to 175, or so rapid that it is impossible to count. The beat in the carotids is very prominent, and in fully developed cases the stomach and abdomen beating synchronously with the heart. The pulse is rapid and small. Heart nearly always upon auscultation presents a systolic murmur; some hypertrophy and dilatation present.

Thyroid Gland: One lobe is usually larger than the other. At first the gland is soft and elastic to the touch, and becomes firmer and harder as the disease progresses. Pulsating and vibrating movements are felt over the gland, and upon auscultation we usually have a continuous humming, intensified at each systole of the heart. A peculiar bruit is heard over the gland. The protrusion of the eyeballs is nearly always bilateral. In marked cases of exophthalmic goitre there is a peculiar staring expression to the countenance. Another symptom, first discovered by Von Graefe, may sometimes be one of the earliest signs of the disease, and consequently of much diagnostic value, viz., when lowering the eye, the lid does not follow correspondingly, and this abnormal condition gives rise to serious changes in the eyeball. It is the function of the lids to cover the globe with tears and to cleanse it of foreign bodies. This function being impaired, dryness, inflammation and ulceration of sclera are apt to develop. Ophthalmoscope shows dilatation and sinuosity of retinal veins, hyperæmia of smaller vessels of retina. Becker has observed pulsations of retinal arteries. Marie, in particular, has lately called attention to a peculiar tremor which affects the whole body or the extremities alone. It shows at times remissions and exacerbations, and may become so violent that there are spasmodic twitchings in the extremities and muscles of the face. Some more of the nervous symptoms are headache, vertigo, weakness of memory and sleeplessness, anxiety and haste in all movements in speaking, etc. Noticeable when visiting patient, they become very excited, pulse beats more rapidly, and unable to express themselves for a few seconds. The expression of face is that of astonishment. Psychical condition is peculiar, the patients are remarkably cheerful, despite their unhappy condition; a slight elevation of temperature generally, with a sensation of warmth and a desire to get near a window; profuse vomiting and diarrhœa nearly always present in severe cases; the diarrhœa is paroxysmal in character, sometimes it will disappear for days and return. Some have an antipathy for food, while in others there is an abnormal appetite, likely due to the disturbance of ennervation.

The following is the case of Mrs. K., aged forty-one; born in Germany; married, six children; always had fairly good health until May, 1892. She was being continually angered by a quarrelsome neighbor, and often became excited. She began to have palpitation of the heart, the intervals gradually becoming shorter. Her neck seemed fuller and her collars were getting too small; swelling of glands became noticeable. Her eyes became prominent, and her friends would remark about her wild look; sensation of warmth; perspired freely; upon slightest exertion would feel fatigued and nervous; symptoms continued getting worse. When I saw her about four months after first indication of the disease she was emaciated and exhausted. Vomiting and diarrhœa were profuse; cramps in the stomach; heart, carotids and abdominal aorta were beating very strongly; heart beats about 155. The symptoms gradually become milder, and patient, to all appearances, was improving nicely. Had not seen her for about three months, when I was again called. Dropsy in the meantime had developed, and the symptoms of exophthalmic goitre had almost disappeared. The case finally ended in recovery.

Another case: Mrs. W., aged about thirty-four, born in Wales; all symptoms quite as pronounced as previous case. Had been an exceptionally healthy woman until her husband was brought home severely burned in the mines. She began to have palpitation, the attacks became more frequent and the other symptoms of exophthalmic goitre gradually developed. Did not respond to treatment as rapidly as first case. Typhoid fever developed, and at about the third week of the fever dropsy set in. The symptoms of exophthalmic goitre abated in this case somewhat. She was convalescing I thought, and about the fifth week, while she was sitting on the sofa, she suddenly expired, probably from heart failure, due to the pre-existing Graves' disease. I had some difficulty in making the diagnosis of typhoid fever for some days on account of the diarrhœa and slight elevation of temperature being nearly always present in exophthalmic goitre.

3. Mrs. G., aged twenty-eight, born in this country of German parentage; had been married

about nine months when I first saw her. The first signs of any trouble commenced about three months after she was married, beginning with extreme nervousness and palpitation of the heart. The symptoms of exophthalmic goitre gradually developed, and when she consulted me she presented a most pronounced case. The patient recovered also. Osler says the course of the disease is usually chronic, very often ending in recovery, except in very severe cases.

Pathology.—The nature of the disease cannot be inferred with certainty from the anatomical changes. The heart has often been found hypertrophied, fatty degeneration and inflammatory changes in the endocardium.

Thyroid Gland.—Aneurismal dilatation and abnormal sinuosity of the arteries, and varicose dilatation of the veins; calcification and cyst formation are generally of older date. Exophthalmus is less prominent after death. This must be explained on the theory that the symptoms are owing first to distension of retro-bulbar vessels and serous infiltration of the orbital adipose tissue.

Nervous System.—Gogle observed that the central canal of the spinal cord was totally obliterated. Abundant development of fat in the interstitial tissue. Hal White has found punctiform hemorrhages visible to the naked eye in the floor of the fourth ventricle. In support of the possibility of this part of the nervous system being the seat of disease in exophthalmic goitre is the frequency with which diabetes has a family relation to Graves' disease.

The Pathological Solution of Graves' Disease.—The theory put forward by Sattler is definite, capable of satisfactorily explaining the principal symptoms, and is also corroborated by experiments of Filehue. Sattler assumes a lesion of the center which presides over the vaso-motor nerves of the thyroid gland and of the intra-orbital tissues. The cardiac phenomena he ascribes to a lesion of the cardio-inhibitory centers of the vagus. Filehue concludes that the restiform bodies are the points traversed by the nerve paths concerned. By dividing the anterior fourth of the restiform bodies Filehue has succeeded in producing exophthalmus. In some other experiments he also caused enlargement of the thyroid gland, and in one case all the symptoms of exophthalmic goitre appeared. Dr. W. H. Thompson, of New York, considers that a paralytic lesion involving the common nucleus of the glosso-pharyngeal vagus, and spinal accessory nerves, and extending to the neighboring center in the medulla, would account for the whole group of symptoms that make up the disease.

With the slight knowledge about the cause and pathology, it would be impossible to outline any course of treatment, more than it should be symptomatic and on general principles, directing the treatment especially to the heart and nervous system. Hygienic treatment is of vital importance in the disease. Climate should also be considered. The removal of patient from the surroundings with which the affection may have been favored; careful attention to diet, especially on account of the continued weak state of the digestive functions; rest in bed, if possible; relieving the pain accompanying the exophthalmus by tying a bandage over the eyes; attending to such details as will soothe and comfort a very nervous and sensitive person. Cold applications to the heart are beneficial in relieving the distressing symptoms.

The medicinal treatment should be directed to general building up of the system and remedies directed to control the action of the heart. Strophanthus has received high commendation for this purpose. Rockwell, of New York, says there is very often enfeeblement of the myocardium, and digitalis in many cases is useful in slowing the rapid systole associated with it. The condition of the heart thus becomes improved by the physiological rest it obtains through prolongation of diastole. While strophanthus and digitalis both tend to lengthen the interval between the contractions of the heart, strophanthus is supposed to contract the calibre of the arterioles in less degree than digitalis, and is to be preferred as not increasing the work of the heart to the same degree as digitalis.

A combination of these drugs possesses undoubted value. The bromides, ergot, arsenic, belladonna, are of great benefit. Electricity has many firm supporters. Rockwell, in an elaborate article in the *Medical Record*, 1893, describes many cases where this method of treatment was carried out with splendid results. Dr. Ayres, of Pittsburg, reports much success in the use of sheep's thyroids, as also Owen, of England, and many others, while many writers fail to find any virtue in it. Dr. Frederick Peterson reports a case cured by thyroidectomy. Improvement began immediately after the operation, and ended in good recovery.

J. Arthur Booth reports two cases treated by thyroidectomy. He says cases of Graves' disease can be entirely cured by operation. How this came about was not clear, yet it might possibly be in one of three ways—a diminution of functional activity of the gland substance, a relief of stretching and irritation of the sympathetic nerve fibers; or finally the removal of pressure. With the comparatively few successful cases where extirpation has been done, I do not think that we should yet adopt indiscriminate operation for this disease, but where the gland assumes such proportions as to cause pressure upon surrounding parts, when this enlargement consists especially of increased connective tissue, an operation to relieve these symptoms would, I think, be advisable. Many favorable results, I believe, can be obtained by pursuing a careful symptomatic course of treatment.

The *Medical World* for November contains a timely article on the subject of extending the service of the United States mail to what is called "express" matter, so that samples of medicine, etc., may be transmitted in this way to all parts of the country. Of course, if this is is to be done, postage must be charged sufficient to cover the cost to the Government, which, we believe, is not the case at present.

THE CLINICAL VALUE OF THE CRESOL PREPARATIONS IN REGARD TO ASEPTIC SURGERY.[*]

By ERIC VONDERGOLTZ, M.D., NEW YORK,
Professor of Gynæcology, Metropolitan Post Graduate School of Medicine, New York City.

THE fact that lysol, at present the chief representative of cresols, was only regarded as a valuable antisepsicum, causes me to give my observations, which prove that lysol and the more recent lakrol,[*] a new domestic cresol preparation, are not alone valuable as antiseptics, but also through their *chemico-mechanical* properties.

The observation that the skin of my hands began to dry, to become fissured and finally to peel off; that all parts of the body washed and rubbed with a lakrol or lysol solution could be spread with a layer of water (remaining adherent to the surface); that stitch-hole irritations were completely frustrated, caused me to study the cresols as antiseptica more closely in the before mentioned fluids, lakrol and lysol. Especially the observation that the epidermis could be fully covered with water, showed that the natural grease of the skin was entirely removed.

Was this accidental, or was this the effect of lysol or lakrol?

To determine this question I put a piece of linen fully saturated with oil, into a jar containing a 2 per cent. solution of lysol (cold). The jar was closed and shaken for three minutes. The linen was then found fully devoid of oil. Another experiment was that I boiled well greased instruments in a 2 per cent. solution for five minutes. The instruments were also cleaned.

It was thus proved that the solutions of the two mentioned cresol preparations remove oil and grease, and consequently the natural grease of the skin was removed. Every surgeon will agree that this oil layer on the skin is the hot-bed for the culture of germs, etc., just what he is most anxious to remove before an operation is attempted. I am much surprised that this chemico-mechanical trait, as this peculiarity of these two cresol preparations may be termed, has not been dealt with prior to this article, for exactly this peculiarity, manifested by its soapy slipperiness, was commented upon by most authors on lysol as a possible drawback, instead of perceiving its real virtue.

The slipperiness is eliminated in my operations in the following manner: After having cleaned the field of operation with a 2 per cent. lakrol or lysol solution, and after everything is in readiness, the field of operation is irrigated with sterilized, viz., boiled water. The instruments are deposited in previously boiled, and so sterilized, water also, after having been boiled in a 2 per cent. lakrol or lysol solution. The operation is thus turned into a perfectly aseptic one.

But this so often abused slipperiness is fully used and appreciated in obstetrical work, for here it is used in place of all lubricants for hands and instruments.

The crucial test for any remedy or drug is the practice, and I can say that my results, through uneventful recoveries of parturients, where different midwives and physicians had tried their skill, and last, not least, in the most horrible surroundings, cannot be attributed to anything else than the chemico-mechanical workings of the before mentioned cresol preparations.

I must especially remember what Dr. Garrigues writes, that mostly his antisepsis in private homes was not satisfactory, as prior to his handling the proper and preventing care had not been instituted. The explanation of this striking difference between Dr. Garrigues' experience and my own, is easily found in the efficiency of lysol or lakrol.

The entire epidermis is protected externally by its own natural grease. We can find an analogous state during confinement upon the mucous surface of the vagina, etc., viz., the vaginal secretion. The infectious matter is introduced to about 99 per cent. by the not properly cleaned fingers and instruments. The physiological secretion of the vagina will not immediately let the germs penetrate the tissues or mingle with the torn or lacerated parts. If now one of the before mentioned cresols, with its absorbing and dissolving properties, is introduced, and the cleaning of the entire genital tract scrupulously done, all imminent danger is removed. And thus I have seen speedy recoveries when I was prepared to see the *exitus lethalis!*

The most emphatic proof of having actually cleaned the vagina, which was claimed to be impossible, is that I did not see any case of simple or gonorrhoic ophthalmia, where I most positively have conducted labor of freshly infected women.

If finally I summarize my observations of these two preparations, lakrol and lysol, I come to the conclusion that the surgical cleanliness formerly attempted by antisepsis in a pure germicidal sense, now by asepsis, will be gained only by the quickest and most thorough removal of the grease layer of the surface, be it epidermis or be it mucous membrane, as the hot-bed for all germs, dirt or decomposing albuminoids, as ptomaines.

To-day we are nearing an aseptic period in surgery. The time is past when either higher situated tissues or the whole organism is destroyed by strong chemical antisepsis. The observations with these sharp antiseptics—resulting in adhesions, aseptic gangrene—brought on loud protests against them. Finally the cresols came to the knowledge of the surgeon. Here the antiseptic power was principally recognized by Gerlach, of Wiesbaden, Germany, that anthrax spores were fully destroyed by a 2.5 per cent. solution in eighteen hours, so that these spores could be inoculated in rabbits without causing their death.

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[*] Lakrol (a fancy name like lysol) is gained in the following way: The cresols (fraction of the distillation of tar-oil, which boil between 190 and 200 degrees Celsius and represented by the formula $C_6 H_4 (Ch_3) .OH$) are dissolved and saponified in an alcohol and natron containing menstruum (Ol. lini usitatissimi). There are circa 52 per cent. of cresols dissolved in lakrol. Lakrol is a dark brown, oily liquid; mixtures are clear in every proportion with cold and hot water, but of lower corrosiveness than lysol solutions.

The next step was to discover if the tissues would not be destroyed. Here an accident proved of especial service. A four-year-old boy drank 25 grammes of undiluted lysol; the child recovered after the stomach was thoroughly washed out.

Regarding the toxic effects in this accidental case with lysol—applicable also to lakrol or lavakresol—these preparations contain in a free state cresylic acid, viz., 50 per cent., or the combination of ortho-para and meta-kresol. To show in how different a manner the surgeon is interested from the bacteriologist, we will compare a few remedies in regard to their antiseptic power. We will find that lakrol or lysol is only inferior to bichloride of mercury, the most dangerous poison.

I.

Spores of anthrax killed (Robert Koch, Berlin, Germany.)

Carbolic acid	3	per cent.	in	7	days	Proved by inoculation on rabbits.
" "	4	"	"	3	"	
" "	5	"	"	2	"	
" "	10	"	"	24	hours	

II.

Spores of anthrax were killed by lysol solution, 2.5 per cent., in eighteen hours; proved by inoculation on rabbits. Borolyptol, 16.7 per cent., in twelve hours; spores completely destroyed.

After eliminating the time honored bichloride of mercury we must compare borolyptol, carbolic acid, lakrol or lysol (equal to 50 per cent. cresylic acid solution).

I know we follow the rule and usage of the bacteriologist; we judge the value of each antiseptic by the smallest per cent. necessary to detroy the spores of anthrax. It follows that lysol effects the destruction in eighteen hours by a strength of 2.5 per cent., and so proves its superiority over a 10 per cent. solution of carbolic acid, or a 16.7 per cent. borolyptol solution.

The difference between the bacteriologist and the surgeon is clearly this: The surgeon requires something for quickly abolishing the noxious germs, etc. It is evident that the surgeon cannot use drugs like carbolic acid in a 10 per cent. or higher solution, nor a drug, as borolyptol, as being too slow.

Lysol, as a cresylic acid solution, meets the requirements, not on account of germicidal power (which is really only inferior to bichloride of mercury) for its effect in destroying germs is also too slow, but as demonstrated by the chemico-mechanical property of the cresylic acid, in removing the germs imbedded in the grease layer of the surface. Finally, if comparing lakrol with lysol, it must be stated, *that both cresylic acid products are absolutely equal,* as shown by the following clinical tests:

1. Regarding the preventive power of decomposition of organic matter.
2. Regarding the chemical reaction against warm and cold, proportional to the percentage.
3. Regarding its removal power of oil and the natural grease of animal tissues.
4. Regarding the deodorizing property of putrescence.
5. Regarding the stimulation of new granulating surfaces.

In the following features lakrol is decidedly superior to lysol:

1. The odor of lakrol will be found less pronounced.
2. The dermatitis effected by the stronger concentration of lakrol will be found to be of a minor degree than that effected by a stronger lysol solution. Thus the lakrol solution will be less objectionable as vaginal or vesical douche (*i. e.* in operations) than lysol.
3. Lakrol or lavakresol is a domestic preparation, while lysol is imported as a foreign drug.

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REPORT OF TWO TRACHEOTOMIES FOR LARYNGEAL CELLULITIS (ABSTRACT.).[*]

By T. C. Evans, M. D., Louisville, Ky.

Lecturer on Ophthalmology and Laryngology in the Kentucky School of Medicine; Member of the Louisville Clinical Society, etc.

CASE I.—On March 11, 1895, I was called to attend a man who was said to be choking to death. I found the patient, aged twenty-nine years, in the throes of a most urgent and agonizing inspiratory dyspnœa. Notwithstanding the extreme dyspnœa, his voice was but little impaired, except from exhaustion. From his friends I learned that on the afternoon of Saturday, the 9th, he complained of chilly sensations and some discomfort on swallowing. On Sunday he had paroxysmal attacks of coughing and dyspnœa. Monday morning, the 11th, I was called to do an intubation.

On laryngoscopic examination I found the epiglottis enormously swollen, and of a deep red color, the free margin forming apparently a complete ring with a small central aperture about the size of a crow's quill, the swelling being more pronounced on the right side. The fact that the voice remained good made it clear to my mind that the swelling was confined to the epiglottis. An intubation being neither possible nor practicable, I advised a tracheotomy. Dr. Ap. Morgan Vance performed the Low operation under cocaine anæsthesia. A stout ligature was passed through the lip of the tracheal wound and the two ligatures tied around the neck, keeping the wound open by tension. These ligatures came away on the fourth day. The swelling of the epiglottis reached its climax forty-eight hours after the operation. Eight days after the operation he was able to breathe comfortably through the larynx. The patient was discharged on March 27, sixteen days after the operation.

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[*] This original paper appeared in the *Medical Record,* New York, vol. 48, No. 18 The discussion which follows has not before appeared in print.

Case II.—April 28, 1895, I was called to see Sallie L., colored, aged twenty-two years. Found her suffering with marked dyspnœa; she could speak only in a faint whisper. From her mother I learned that she had been hoarse for three or four days, and had been attended by a general practitioner until within a few hours of the time that I was called, when he retired from the case, advising them to call a specialist. With the laryngoscope I found the obstruction in the arytenoid and inter-arytenoid region. I thought it would be possible to introduce an intubation tube. Trying first the medium-sized rubber tube, and finding it impossible to introduce this, I next tried the small adult tube, and was able to engage the point of the tube in the chink, but could not, with all the force I felt at liberty to use, introduce the tube into the trachea. She readily consented to a tracheotomy.. Dr. W. C. Dugan was called. In the few minutes that elapsed between the time he was called and his arrival, the patient became unconscious. The conditions were now so serious as to demand an immediate operation. Without waiting for cocaine I made extension of the head, and Dr. Dugan fixed the trachea with his left hand and plunged the knife into the tube. Withdrawing the knife the wound was kept open by a pair of artery forceps. The tracheotomy tube was introduced between the blades and the forceps. The patient's head was then lowered to prevent the blood from flowing into the trachea. The hemorrhage was inconsiderable, and stopped of its own accord. The incision was through the first or second ring of the trachea, and evidently severed the thyroid isthmus. An examination of the larynx twelve hours after the operation showed the œdema involved also the ventricular bands.

On the eighth day the tube was removed. There was no return of the dyspnœa, though the hoarseness continued for nearly six weeks. The site of the trachial wound was plainly visible with the laryngoscope for several months after the operation.

A few words in regard to the anatomy of the parts involved and the pathological conditions present in the acute obstructive diseases of the larynx will, I hope, be sufficient apology and explanation for having reported the foregoing cases under the above title.

The mucous membrane of the larynx, as all well know, is more or less intimately attached to the underlying structures by a layer of connective tissue varying in thickness and density in different regions of the larynx. This connective tissue is especially abundant and lax in the ary-epiglottic folds, the ventricular bands and posterior surface of the epiglottis. These areas of connective tissue are of course subject to the same diseases as the connective tissue in other parts of the body, and under certain conditions become the seat of an inflammatory infiltration or serous transudation sufficient in extent or quantity to lessen or altogether occlude the lumen of the larynx, and produce death by mechanical interference with respiration. Much confusion, in the nomenclature as well as in the treatment of the acute obstructive diseases of the larynx, has been caused by grouping together the several different pathological conditions of the connective tissue of the larynx under the general terms "Œdema of the Glottis," or "Œdema of the Larynx," the first of which is not only a misnomer, but an anatomical impossibility, from the fact that in the true vocal cord the mucous membrane is firmly adherent to the underlying structures. The last is, to say the least, ill-chosen, or should be used in a restricted sense to apply to the non-inflammatory cases; for this reason I have presumed to say a few words in regard to the nosology of this particular branch of laryngology.

After eliminating those infiltrations and exudations which form a part of the clinical history of perichondritis, tubercular and syphilitic larngytis, two distinct affections, one an inflammatory infiltration due to some form of sepsis, and which may terminate in resolution (as in the two cases reported), or in suppuration, either circumscribed or diffuse; the other a non-inflammatory serous transudation, due to some renal or hepatic disease, some blood dyscrasia, or circulatory disturbance. Now, in order to describe the conditions more explicitly to avoid confusion, and at the same time to conform to the nomenclature of general medicine and surgery, I would designate the former affection as laryngeal cellulitis, the latter as laryngeal anasarca. I am inclined to think that by far the larger proportion of cases are inflammatory, as localized anasarcas are rather rare in any part of the body.

I have purposely laid considerable stress upon the fact that in the so-called œdema the lesion is in the sub-mucous connective tissue and not in the mucous membrane, for the reason that the opinion seems to be more or less prevalent that œdema is a sequela or complication of catarrhal laryngitis, an opinion which seems to me to be entirely erroneous.

A marked impairment of the voice may follow an acute catarrhal laryngitis, but an obstruction sufficient to interfere to any considerable extent with respiration is always due to some involvement of the connective tissue. The literature on "Œdema of the Larynx" is rather voluminous but confusing, ambiguous and unsatisfactory. Most authors quote largely from the statistics and conclusions of Sesteir, of Paris, who collected and tabulated 245 cases of œdema of the larynx, and wrote a monograph on the subject in 1852. This was before the day of the laryngoscope, and four-fifths of the cases were gleaned from medical literature of that day when it was customary to call all forms of laryngeal obstruction "Œdema Glottitis." Again, several authors quote from the statistics of Peltesohn, who in 3,887 autopsies found œdema of the larynx 210 times, or 1 in 18, while Hoffman, in the same city, in 6,062 autopsies found only 33, or 1 in 183. The divisions that these statisticians make of their cases into primary and secondary œdemas fail to convey to me any definite impression either of the pathology or etiology of the affection. Owing to the faulty classification, and the fact that the statistics are made almost entirely from post-mortem examinations, it is impossible to form an intelligent estimate of the mortality.

As to the treatment, the text-books recommend hypodermatic injections of pilocarpine, steam inhalations, and especially scarification. As to scarification I wish to demur; I can see how in cases of anasarca it would lessen the effusion, or in slight inflammatory affections the local depletion might be beneficial, but when the case has become at all urgent, scarification would add a serious complication in the way of hemorrhage, which would be sufficient to excite paroxysms of coughing, which may at any time prove fatal. Aside from this, we know that the swelling due to cellulitis in other parts of the body is not readily controlled by incisions. Most of the cases will require the more radical measure of tracheotomy, which should be performed early, without subjecting the patient to hours and days of danger and distress. Intubation is not suited to these cases.

DISCUSSION.

Dr. J. M. Ray: I have seen within the last six months three cases of so-called œdema of the glottis, and I want to agree with the essayist concerning the uselessness of intubation in these cases. I have been unable to do anything with it. In every case that I have encountered the glottis has been so thick and so boggy that it was impossible to insert the intubation tube. I made an unsuccessful attempt in one case; in the others I did not think the tube was necessary. I can see very well how even after getting an intubation tube inserted, the glottis being so thick and boggy, it would overhang the mouth of the tube and so have little or no effect in relieving the difficult breathing. Two of the cases seen recently occurred in elderly people; the appearance was a non-inflammatory œdema of the epiglottis and ary-epiglottic folds; they suffered from albuminuria.

One point I wish to emphasize is that in many of these cases scarifying the œdematous parts thoroughly has little or no immediate effect. I believe, though, that I did secure some effect from the local application of cocaine; this agent contracts the blood vessels and certainly decidedly lessens the dyspnœa. One case died after the symptoms of laryngeal obstruction began to subside, from heart complication. Another case recovered after a week or ten days without interference beyond cocaine and scarification.

The third case occurred in a young man, seemingly in perfect health, who had been on a debauch. He first suffered from acute laryngeal symptoms, the epiglottis being involved secondarily. Intubation was useless because of the great œdema about the epiglottis. Not having a tracheotomy set with me at the time, I went back to my office expecting to take a surgeon at once and perform a tracheotomy, but before leaving the office received a telephone message that the patient was dead. The trouble in this case was inflammatory in character. A peculiar symptom was an intense œdema involving the whole neck, extending from the clavicle up to the jaw, and pitting on pressure. I believe if he had been tracheotomized at the time of my first visit, he might have been saved; but he was a very large, thick-necked man, weighing over 200 pounds, and to have performed a tracheotomy through this fat and infiltrated tissue would have been a very difficult task.

Dr. S. G. Dabney: I have encountered several cases of the character mentioned by the essayist, and on one occasion had to have a tracheotomy performed, after an operation upon the larynx, the œdema or swelling following several days later. I was especially interested in the fact that albuminuria was present in two of the cases mentioned by Dr. Ray. Bosworth, in his work on diseases of the larynx, emphasizes the point that there is an intimate connection between these affections of the larynx and Bright's disease.

Pilocarpine has been used quite extensively for a long time in the treatment of cases such as are under discussion. I was also interested in another feature mentioned by Dr. Ray, that œdema of the larnyx came on after a debauch. I have had one case in which considerable epiglottic swelling was present in a man who had been a very heavy drinker. I think the œdema occasionally, though rarely, follows a catarrh of the larynx in hard drinkers. Of course it cannot be classified under the name of catarrh, which we recognize to be a misnomer, but it may often be associated with laryngeal inflammation, particularly in drinking subjects.

Dr. J. B. Marvin: I see every now and then a case pretty close kin to those of œdema of the larynx, viz., an œdema of the upper structures of the uvula and faucial walls of the tonsils. These cases are sometimes very distressing. The trouble has always been with me to know how severe they would become, and whether they might not be associated with œdema of the glottis, as we ordinarily call it. I have been interested in finding out, if I could, what was the pathological cause of these cases. I saw a case two days ago occurring in the person of a young man. I was called in great haste, and just as I was leaving a messenger came requesting that I bring some cocaine, as the patient was suffering a great deal with his throat. I found that the patient had been operated upon by one of the specialists of the city the day before for some tonsillar trouble. He had used the cautery, touching each tonsil lightly, making a slight eschar on the left tonsil, which was rather more marked on the right. The patient had a bad night after the operation, growing very much worse the following day, and when I was called he was suffering intensely; respiration was seriously interfered with and he could hardly speak. Inspection of the throat revealed an intense redness of the whole surface of the posterior pharynx. The uvula was as large as my thumb, hanging well down into the throat, and his constant efforts to swallow it were extremely disagreeable.

Another patient whom I have watched for a number of years is a man fifty years old, who has had frequent attacks similar to the case I have just reported, coming on suddenly. In this case there was œdema simply of the uvula, and this has been so marked and extensive that the uvula has become bifurcated. In both these cases I have been extremely suspicious of kidney trouble. The urine has been repeatedly examined, showing only a trace of albumen, but the urine is very light in color and of low specific gravity, features which always make me suspicious that the case in time will develop into the so-called granular kidney.

Barring the existence of possible nephritis, the only thing that I have been able to find is rheumatism. These two seem to embrace, as far as I have been able to find, the etiological factors in these cases.

As to the use of cocaine: There is no doubt that this drug will shrink up the tissues quicker than anything we can use, but it is followed by an increased engorgement, therefore does more harm than good. I have tried pilocarpine, with the effect of producing intense salivation; in some cases instead of causing salivation there has been great cardiac depression. Unless it does excite free salivation or free sweating, cardiac depression is likely to be very marked. I am a little chary how I use pilocarpine, never giving it in such large doses as some authorities mention. Am always prepared to give its antidote, atropia, if necessary.

Dr. W. C. Dugan: In doing a tracheotomy the question arises which shall we do, a high or low operation; that is, shall we operate above or below the isthmus? Of course in cases like those under discussion it is not a question of how we shall operate, but the important point is to save the patient's life, as he is dying from obstruction, and no one would attempt to go in with a knife through the lower part of a man's neck where we would endanger the patient's life by opening the anterior jugular vein, for, as has been stated, the knife is plunged immediately into the trachea. We can make an incision above the isthmus; where tissue is not the only consideration expose the isthmus by a careful dissection; then dissect loose what is called the suspensory ligament from the thyroid, and can then slip down the isthmus as far as we desire. We can expose as many rings of the trachea as we wish in this manner. The trachea can then be incised and a tube inserted, the isthmus being held down out of the way. It is a very simple operation in the adult, but as Jacobi has said, it is one of the most difficult operations in the surgery of the child.

I have had occasion to perform the operation a number of times, in the manner described by Dr. Evans, and have not had to use any general anæsthesia, or as to that, any at all. The patients were found deeply cyanosed, wholly or partially unconscious, so that anæsthesia was unnecessary. The trachea is held with one hand, then a knife is plunged immediately through the parts down into the trachea and then cut downward until you have divided as many rings as you wish; then the knife is turned, thus holding the wound open, and when we slip in a pair of forceps and open them between the jaws of the forceps insert a tracheotomy tube. The patient's head is kept lowered for a few minutes to allow the blood to flow out of the mouth. This is usually a very simple procedure, and the patient experiences no trouble. Where we operate some distance from the office, I do not think a tracheotomy tube ought to be used, for every man who has performed many of these operations knows how prone these tubes are to become obstructed, and unless you have an educated nurse, your patient is very apt to die, or at least suffer greatly from this closure. I am partial to the method described by Dr. Evans and always use it. In cases where I make a dissection, instead of putting in a tracheotomy tube, I simply cut the rings and put a strong thread through each side, drawing the wound open in this way and then, by drawing them around the neck and tying them, the wound may be kept open for any length of time. This plan will be found to work very nicely, especially in children, and, as I stated, in all cases that have not the services of a trained nurse or far from the medical attendant.

Dr. T. C. Evans: In regard to the use of cocaine in the larynx: As Drs. Ray and Marvin have both mentioned, its use is not followed by good results. The relief from cocaine is due to its effect upon the inflamed tissues by causing local anæsthesia. I certainly agree with Dr. Marvin that cocaine is a very bad thing to use in the throat where we have great obstruction, as the after effects are sometimes very disagreeable.

Dr. Dugan is correct in stating that the tracheotomy tube ought never to be used in these cases, unless the operation is performed in an infirmary or hospital where the patient can be carefully watched. It is very difficult to keep the tube clean. In one of the cases I have reported, where a tube was used two or three times a day it would become obstructed with inspissated mucus and have to be removed, cleaned and reinserted. The open method is certainly preferable to the tube in most cases.

The case spoken of by Dr. Marvin, which had been operated upon by a specialist, was one of follicular tonsillitis, the patient being subject to such attacks. I think the pathology of such cases is just as I have outlined in my paper; that there is first a catarrhal condition, perhaps, of the tonsil, which makes an opening for specific infection. In this way cellulitis is developed, just as we would have cellulitis from a surgical wound anywhere else. As stated in my paper, statistics give us no idea of what proportion of cases are due to blood dyscrasia compared with other causes.

Dr. Dabney seems to think the œdema of the larynx often follows acute laryngeal catarrh. I think that in cases of acute catarrhal inflammation of the mucous membrane of the larynx, this simply opens the way for septic material to enter the sub-mucous tissue.

I am sorry that some one has not gone into the pathology of the question. I am able to say very little about it from my own experience.

Dr. J. M. Ray: I want to say a word about the use of galvano-cautery about the throat and nose, and some of the complications or troubles that follow it. A prominent lawyer of this city went to New York five years ago to undergo an operation upon the nasal septum. It was found necessary by one of New York's leading rhinologists and laryngologists to divide the septum by sawing off a piece by means of a nasal saw. The next day the patient's throat commenced to ache and give him a little pain; in two days he was violently ill from a suppurative abscess in the fibrous tissue around the tonsil, and for two weeks he was in quite a serious condition in one of the hospitals of New York as a result of this operation. He afterwards came to me, and I finished the operation that had been started in New York, and the patient made a complete recovery.

In talking with the doctor recently in New York who performed the operation upon this patient, he told me that he had seen a number of such conditions as a result of operative measures about the nose—a suppurative inflammation of the fibrous tissue about the tonsil, constituting so-called quinsy.

Recently a gentleman came to me having some non-inflammatory thickening of the turbinated tissue, which I treated with the galvano-cautery. Two days afterward he sent for me to come at once to his house, as he was suffering intensely with his throat. He was sick for ten days with a peri-tonsillar abscess resulting from the cauterization of the nose. I have cauterized hundreds and hundreds of turbinates, and these are the only cases in which such complication has followed.

MEDICINE AND RELIGION.

By James A. Carmichael, M. D., New York

TO-DAY, thanks to the liberality with which the benefits of instruction are everywhere accessible, the whole world pretends to believe itself competent to discuss and decide those two subjects that are surrounded by so much that is mysterious and uncertain, medicine and religion. The child and the adolescent—they are not more than adolescent at fifteen years—search with avidity in books, suitable or other, for some signs or words that will lift the veil of doubt from a science which they erroneously believe to be impure. On the other hand, they learn and practise the principles of a religion which the impressionability of their minds and their imagination causes them to regard as a source of endless happiness or of eternal punishment. In the evening they are guilty of secret and immoral practices, and the next day confess to the physician in order to escape the penalties they have justly incurred. The adult is more sceptical; he has no faith in the one nor in the other. The vigor of his twenty or thirty years permits him to disregard the truths of medicine, while the date, that to him seems remote, at which he will recur to it, prevents him from considering those of religion. The game of life, the turbulence of his passions, and an overweening confidence in himself, make him forget everything except what can procure for him the pleasures and enjoyments of the moment and the allurements of passing time. But age comes on, and with it the inevitable accompaniment of physical disorders, perhaps slight at first, but finally of disease whose aggravation may become fatal. Then it is that the old man, whether from conviction or fear, regards with terror the great beyond, and turns to medicine, in which he believes he may discover the panacea that will indefinitely defer the dreaded future, and he bows his gray head in religious devotion, which confers spiritual safety, as medicine does temporally. Read the memoirs written by old men from day to day, and it will be found that their lives are passed between the fear of God and their hope and trust in medicine. Look and see, ye profane and misguided, whither your lack of philosophy is leading you, and behold wherein we are your superior! Do we often speak of death when we write our memoirs, or often of the eternity beyond life? No! To us that is a mere bagatelle. To you death is the end of your hopes, of your ambitions, the sum of terrors. To us it is but the disintegration of cells that a morphine puncture can make less appreciable to our senses, and the accomplishment of which we regard with the same serenity with which the old grenadier sees his comrades falling around and about him in the heat of battle. We die as we live, by the alternate decay and repair of the complex parts that make the mysterious whole which we call the human animal.

The above, translated from the *Rèvue Médical*, represents the sentiments and opinions, religious, atheistical and philosophical, as also medical, physiological, histological and cellulogical, of the distinguished editor of the prominent journal named. It certainly gives a clever and truthful portraiture of human proclivities, superstitions and infirmities on the one hand, and, on his side of the question the embodiment of an optimistic view of nothingness, with an euthanasia of annihilation that gives opportunity for a startling tableau, a dramatic exit and an effective "chute de rideau," so attractive to Gallic sensibility. As well as memory serves, it was Rochefoucauld who wrote:

> "Quand on n'a pas ce qu'on aime
> Il faut aimer ce qu'on a."

Thus showing the native versatility of the Gaul, and his capacity for self-accommodation in one direction, while in another a rainy day may make him fling himself from a window, or shuffle off his coil when tired and in despair of "buttoning and unbuttoning." In the unending struggle of human life, and from the nature of man's organization, undue exercise of the powers appertaining thereto must, of necessity, be followed by alternate periods of exaltation and depression, mental and physical. In the heyday of youth, when blood-currents run hot and tumultuous, when the heart beats high, and those wondrous cells in the bark[*] and pith[†] of the brain are vivid and animate with their several duties of the elaboration of thought, intellect, mind, and the maintenance of animal life, what matter medicine and religion? Then comes trippingly upon the tongue: "Throw physic to the dogs, I'll none of it." "The world is mine oyster." "Let us eat, drink and be merry." But, just here, what means that gentle "sussurrus" that's tapping at our ear's outer window, running along the frail bridge that spans the middle space, and now is tapping at another window that opens and admits to our inner consciousness, and we hear: "For to-morrow we die?" Is that man to be envied who writes, so that all the world may see: "To us death is but the disintegration of cells that a morphine puncture can make less appreciable to our senses. We die as we live, by the alternate decay and repair of the complex parts that make the mysterious whole which we call the human animal?" What an ignominious falling off is here, when we may reckon nothing beyond, after

> "This too, too solid flesh shall melt,
> Thaw, and resolve itself into a dew."

Being so, then there's nothing left us but the humiliating and degrading self-apostrophy:

> "If so soon I'm to be done for,
> I wonder what I was begun for."

A gloomy and brooding mind must, indeed, look out from the eyes that can see nothing but the dissolution of matter and the trail of decay! This would be to hang to life by tendrils so frail that our birth is nothing but our death begun. A notorious modern infidel expresses himself in a civilized community, before a gaping and vulgar public, in these words: "If we are to live again, it will be by a process of Nature." For an infidel to appeal to the processes of Nature in support of a possible future existence, is to verify an old poetic thought: "By night an atheist half believes a God." He forgot, or failed to say, that the processes of Nature were begotten of Creative Law, and that Creative Law was instituted from the beginning, and impelled in its operations by omipotence and ominiscience. But he did not forget to supplement Nature and her handiwork with scoffing denial and abnegation of the existence of the Great Creator of Law, and relieved his mind with rude jest and sacrilegious ribaldry.

"An atheist's laugh's a poor exchange for Deity offended." Says the editor of the *Rèvue*: "Do we often speak of death when we write our memoirs, or often of the eternity beyond life? No, to us that is a mere bagatelle, and death is but the disintegration of cells that a morphine puncture can make less appreciable to our senses." Thus interpreted, in what does the editor differ from the infidel just quoted? The latter ventures the thought: "If we are to live again, it will be by a process of Nature." The former not only ignores Nature, but even the processes and agencies by which the most perfect and wonderful of her works, man, is created, are flippantly dismissed with the contemptuous expression: "Disintegration of cells," and with a flout and a jeer at the old man that passes his life between the fear of God and trust in medicine, he hugs himself with the consoling self-complacency with which he proclaims: "Look and see, ye profane and misguided, whither your lack of philosophy is leading you, and behold wherein we are your superior."

In contrasting the two of this "par nobile fratrum," editor and infidel, the advantage is surely on the side of the infidel. He is without knowledge, so far as appears, of the processes of Nature in the perfection and accomplishment of her operations, yet he supposes a possible life in the future by one or more of those processes. How is it with the other? To him, as one holding constant communication and familiar association with the perpetual revelations and developments of science, as they are unfolded day by day and hour by hour, and to whom is assigned the duty of proclaiming them to the world, to him an eternity beyond life is a "bagatelle," and death but a "disintegration of cells."

That mind must indeed be made of impenetrable stuff, that conscience choked and seared by contact with the world, perhaps outlived all its obligations or even its allurements and pleasures, and ready to exclaim with the misanthrope: "Man delights me not, nor woman either," or with the Juif errant (Wandering Jew): "I wander on, forever on, which way I turn, no rest, no peace!" "Death nothing but a disintegration of cells!!" What have the cells done for him? Given him life, brought him into the world, endowed him with whatever of individuality, mental, physical and moral, he may have been possessed. Made of him a man among men, put into his hand an instrument with which to inscribe and convey the teachings of ever fruitful science, destined to bestow benefits upon his kind throughout all the world. With intellect and reason to see and study Nature in all her marvelous work, to look up from Nature to Nature's God, and with all this to have life depart and go out, like the snuff of a candle, not even its last expiring flicker to penetrate the darkness of the scene of death, which is naught but "a disintegration of cells," nor illuminate it with a hope in an eternity that is only a "bagatelle."

> "Great God, I'd rather be a Pagan
> And suckled in a creed outworn."

CHRONIC POSTERIOR URETHRITIS.

By I. J. BUSH, M. D., PECOS, TEX.[*]

CHRONIC urethritis, unlike the acute form, is in a great majority of cases confined to the posterior portion of the canal. This is mainly due to its anatomical construction, the posterior portion being guarded from the entrance of fluids by the compressor urethra muscle, and, moreover, being more thickly studded with glands, we can easily see how it is that this part of the canal is most frequently the seat of the disease in its chronic form.

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[*] Cortex. [†] Ganglia.

[*] Company Surgeon for the T. & P. and P. V. Railways; Secretary Board of Medical Examiners, 34th Dist. of Texas.

The acute attack begins to subside in two weeks from the onset of the disease, the discharge becomes less purulent in character and much diminished in quantity, until finally there only remains a slight glairy discharge known as gleet, which may continue for months or may finally disappear altogether, but its subsidence does not end the trouble by any means, but merely proves that a series of pathological changes are taking place, differing in character from the original trouble and requiring quite a different line of treatment.

First, we have a thickened, inflamed condition of the mucous membrane, which is thrown into folds, then the glands become involved, and later on the deeper lying structures. The epithelial lining of the membrane peels off, leaving an abraded surface, which is irritated by the passing urine to such an extent that small ulcers form. Nature now comes to the rescue and forms a deposit of lymph, which, becoming organized, one pathological condition is substituted for another, and the trouble goes from bad to worse, pus forms in the sinuses and deep lying folds of the diseased membrane and is washed out by the flow of urine, and appears as shreds or strings.

The symptoms produced by the changes are dull, aching pains in the perineum, with a burning, scalding sensation in the affected urethra, sharp pains shooting along the nerves, which may be slight or severe, and extend to the bladder or rectum.

The diagnosis is comparably easy. The most simple way is to procure three glasses, and with an ordinary syringe inject clear water into the anterior urethra and allow it to flow out into a glass, when, if the disease is anteriorly, the water will contain shreds. Now direct the patient to urinate in each one of the remaining glasses, when, if the first urine passed contained shreds, the disease is in the posterior urethra, and if the last passed contained them, the trouble is cystitis. If it is suspected that the seminal vesicles are involved wash out the bladder through a soft catheter or irrigator, then introduce the finger into the rectum, and by massage press out the pus, then rewash the bladder and examine the water for pus.

There are two principles of treatment applicable to this disease, viz., pressure from steel sounds, and injections. The sound must be of sufficient size to thoroughly distend the folds of the diseased mucous membrane, and as this portion of the canal is a pouch-like cavity the meatus will often require to be slit up and enlarged, else this part of the treatment will fail. Having warmed the sound by immersing it in hot water or holding it over the flame of a spirit lamp, it must be annointed with vaseline and gently passed into the bladder, increasing the size gradually until the size of the urethra is reached. Some urethras are very sensitive, so the operator must exercise great care and not produce too much irritation. As soon as the irritation has passed away it may be used again, but judgment must be used in the frequency of its use, lest harm result.

The injection is best given immediately following the withdrawal of the sound; the best preparation is unquestionably a solution of nitrate of silver, beginning with one grain to four ounces; the strength may be increased gradually at each treatment, just in proportion as the patient can stand it, care being used that too much irritation is not produced. If there is much pain and tenesmus following the injection a quarter of a grain of morphia dissolved in two or three drachms of water and thrown into the rectum half an hour prior to the treatment will prevent it. If the bladder is empty it is advisable to inject two or three ounces of water, rendered antiseptic, prior to the passage of the sound. This will follow its withdrawal, and wash out the pus that has been pressed out, thus rendering the parts clean and in better condition to receive the injected fluid. The best method of injecting the solution is to first introduce a soft catheter well back into the urethra and inject the fluid through it, using a hard rubber syringe holding about two ounces, and as the solution is forced in gradually withdraw the catheter, thus bringing the fluid in contact with all portions of the diseased area. The more sensitive anterior urethra is protected from the irritating effects of the silver by the vaseline, which the sound has deposited along the membrane. Cocaine should never be used in this operation. If the patient has no tubercular or malignant disease of the parts, this treatment, skillfully applied, will invariably result in a cure. Of course, if a stricture exists it must receive treatment at the same time.

OVARIAN CYST AND PYOSALPINX.*

By Louis Frank, M. D., Louisville, Ky.

Gynæcologist to the Louisville City Hospital, etc., Louisville, Ky.

THIS specimen is from a patient twenty-four years of age, whom I saw first about three weeks ago, giving the history of some indefinite pain, etc., in the abdomen. An examination revealed a decided enlargement upon one side, with some induration upon the other. She had considerable pain during menstruation. An operation was advised and carried out. She was prepared for an operation in the usual manner, except that the urine was not examined; as a rule I always do in all operative cases. The anæsthetic given was first chloroform, followed by ether.

Upon opening the abdomen I found there was an ovarian cyst as large as my fist upon one side, with a pyosalpinx upon the other. Both were removed and the patient was put to bed in good condition, She showed some delay in recovering from ether, it being eighteen hours before she had fully rallied. She was in an anæsthetic condition, partially, it being difficult to arouse her, for at least twelve hours after the operation. The next day the kidneys secreted urine freely; however, the amount of urine diminished gradually, and on the third day after the operation she passed only seven and one-half ounces. At the same time her temperature gradually began to go up, she went into a semi-comatose condition from which she could be aroused with difficulty. At this stage there were some hallucinations, and, I believe, some other mental disturbances. A specimen of the urine was examined on the third day and found to be loaded with casts, both hyaline and granular, urine markedly diminished in quantity. Test for albumin showed, upon boiling the urine and allowing it to stand for half an hour, the test tube was about half full of precipitated albumin; I took it to be 1½ to 2 per cent. She had typical symptoms, as shown by the urine, of chronic Bright's disease, and confirmatory evidence has become apparent since. She still has albumin in the urine, and casts are still present. She has recovered completely from the effects of the operation, though at the time the stitches were taken out there was a small abcess and some suppuration following, which continued for several days then ceased.

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* Reported to the Louisville Clinical Society. Stenographically reported for this journal by C. C. Mapes.

The operation was performed on May 29th, and on June 17th she was walking about. The continued high temperature, as shown by the chart which I present, was no doubt due to the condition of the kidneys, although the stitch abscess may also have played a part. I think this continued elevation of temperature is rather unusual in this form of kidney disease.

The case is interesting from the fact that ether was given for the operation, followed by the marked diminution in amount of the urine, and recovery afterwards, she being in a condition of uræmic coma for several days. Infusions of digitalis and citrate of potash were given freely, and on the fourth day after the operation the amount of urine voided was twelve ounces; fifth day, seventeen ounces; sixth day, twenty-seven ounces, and on the seventh day thirty-eight ounces. She is now passing about the normal amount—forty-five to fifty ounces daily, and is on tonics and the usual treatment upon which we put cases of Bright's disease.

I report the case to again impress upon every one the importance of examining the urine in all cases where an operation is to be performed; and it further shows us that in the event we have Bright's disease pre-existing that ether can sometimes be administered as the anæsthetic and the patients recover.

DISCUSSION.

Dr. W. O. Roberts: I have had two laparotomies recently in which ether was used, and in both these cases the urine was examined chemically immediately prior to the operation; and in neither of them was there any albumin. In one of them, a man aged sixty-four years, had an abdominal tumor, the exact nature of which was not altogether certain until after the abdomen was opened. It was then found to be a carcinoma of the duodenum. He had no elevation of temperature following the operation. He was operated upon in the morning between ten and eleven o'clock. That evening he voided through the catheter six ounces of urine; the next morning three ounces; the next evening there was none at all, and I do not think from that time until the day of his death, which was four days after the operation was performed, there were four ounces of urine secreted. He died of uræmic poisoning.

I had another case following that in a young woman who had double pyosalpinx; her urine was also examined chemically the day of the operation, and no albumin was found, excepting a small amount, which was found before the urine was strained, and which I took to be due to a little pus in the urine. The operation was performed at ten o'clock in the morning, and in the evening we drew off from her bladder three ounces of urine. The next morning there was not as much as two ounces; she was put upon diuretics immediately; the quantity of urine gradually increased, but I was apprehensive that she would die also of uræmia, but she recovered. It is always my custom to examine the urine at least chemically before using ether, and here are two cases in which no albumin was found by a careful examination of the urine; notwithstanding that fact, one of them died of uræmia, and the other one was on the verge of death but recovered.

CLINIQUE.

MESENTERIC CYST SIMULATING ENLARGED GALL BLADDER.*

BY J. B. MARVIN, M. D., LOUISVILLE, KY.
Professor of the Principles and Practice of Medicine and Clinical Medicine in the Kentucky School of Medicine, etc., Louisville, Ky.

I WILL report a case which presents some features of interest, and shows how easy it is for us to make mistakes. I believe I presented the case before this Society; I know I did to the Louisville Academy of Medicine, some months ago. The patient was a man aged forty-six years, who had an abdominal tumor, the provisional diagnosis having been made of malignant growth of the stomach. The man had the appearance of being quite aged, at least sixty or sixty-five; hair very white; face white; cachectic in appearance; with a history of dyspeptic troubles, nausea, vomiting and constipation; dating over quite a period of time. Frequent examination of the gastric contents revealed a great decrease in muriatic acid. There was considerable pain in the region of the stomach, and on examination a tumor could be easily made out; this tumor, however, seemed to be rather in the median line, if anything more to the left than the right.

The case was kept under observation for some months, and the tumor seemed to be gradually enlarging. I took him before the class at the Kentucky School of Medicine, after having had him under observation for several weeks, to demonstrate this growth. It was quite globular then, and much larger in size, easily palpable, and the point I made then was whether it was a solid tumor or not. In a little while I thought I could detect fluctuation. It was questionable whether the growth was a cystic degeneration or a sarcomatous growth. By repeated examinations it was easy enough to detect fluid. I proposed to aspirate, simply as an exploratory measure, and made an appointment with him for this purpose, but he failed to keep it. I did not see him again for six weeks. He came back then, looking much worse, with the tumor very large.

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* Reported to the Louisville Clinical Society. Stenographically reported for this journal by C. C. Mapes.

I took him before the class that morning, inserted an aspirator needle and drew out a dark coffee-colored fluid. He remarked afterwards that he believed it was some of the coffee that he drank for breakfast that morning, and that the needle had gone into his stomach. I then proposed to him to have an exploratory incision made, which was performed shortly afterwards by Dr. Holloway. We found an enormous tumor, which was punctured, and about a water bucket full of dark-colored fluid evacuated. The question then arose whether or not it was a cyst of the gall bladder. Dr. Holloway was inclined to that opinion. Dr. Samuel, who assisted in the operation, made a thorough exploration of the interior of the cavity, and claimed that he could feel the gall bladder. Dr. Holloway inserted his fingers through a rent or slit in the cyst wall and stated that it must be the gall bladder. I had Dr. Weidner make an examination previous to this of the contents of the tumor which had been withdrawn, and he did not discover any bile, so I disagreed with Dr. Holloway in the opinion that it was a cyst of the gall bladder; it was a cyst, not of the gall bladder; it was not a malignant growth or growth of any kind connected with the stomach, but it was a very large cyst probably springing from the mesentery.

The wound was closed after thoroughly washing it out with an antiseptic solution, and the man kept under observation for quite a long time. He made a capital recovery and gained materially in weight. A remarkable feature is that he has changed wonderfully for the better in appearance; his hair has changed from white to black, or a dark brown; he looks now like a man fifteen or twenty years younger than he did before the operation. Another notable feature is the changed appearance of the skin. Before the operation it was sallow and unhealthy in appearance, but now presents a healthy color, showing evidence of improved nutrition, etc.

You will remember that Dr. George W. Griffiths reported before this Society some months since the case of a man whose hair turned from white to black after exposure to severe cold during a fire one bitter cold night, but in this case it has grown six or eight shades darker. I take it simply from the improved nutrition of the patient. (Discussion then followed.)

One or two points have been suggested in the discussion, to which I shall refer in closing: The patient had lost a great deal of flesh; he was comparatively a young man; he had been a drinking man in previous years, but not to excess. There was no direct history of any serious trauma. He complained of some pain and an uneasy sensation about the stomach at all times, and considerable pain after manipulation. The tumor grew gradually downward and forward, increasing in size quite rapidly after a certain point was reached. It certainly sprang from structures high up, and occupied nearly the center of the cavity; it was a very globular, symmetrical cyst. I think Dr. Frank is correct that all cystic tumors in this region are retro-peritoneal.

BONY GROWTH OF THE AUDITORY CANAL.*

By Wm. Cheatham, M.D., Louisville, Ky.,
Professor of Ophthalmology, Otology and Laryngology in the Louisville Medical College, etc., Louisville, Ky.

THE history of the case before you is rather interesting, and I take it the indications for treatment are plain.

Mr. N., aged thirty years, occupation freight conductor. He states that the left side of his head began to enlarge twelve years ago. There is no history of trauma; enlargement gradual; he thinks it is larger now than one year ago. His ear began to stop up, as he expressed it, at night, twelve years ago; when he would get up next morning the ear would open. There was no pain evinced about the ear until last May, when he says it gathered and broke, and has been discharging off and on since. When it is not discharging there is more or less pain. For eleven years the ear has been stopped up almost constantly. There has been no vertigo; slight rheumatism; no illness in recent years; no history of syphilis. He has two healthy children; wife has had one miscarriage at three months. His vision is normal, 20/20; fundus of left eye normal, H.D.R. 50/60; L. P/60. Hearing perfect in right ear; bone conduction good on left side.

He came to me for treatment last Friday with this history. Looking into his left ear I saw what I at first thought was a polyp, and suggested that it be removed. To my surprise, however, I found that the substance blocking up the ear was not a polyp, but a hard tumor attached to the bone. There was a great deal of swelling of the canal, discharge slight, and for that reason he had considerable pain. I sent him home advising hot applications; last night (Sunday) the ear began to discharge, which was followed by relief. The hot applications reduced the swelling of the canal and caused a free discharge and afforded relief.

These bony growths sometimes spring from the periosteum, sometimes from the bone itself, being an osseous degeneration of the fibrous tissue of the canal. They usually spring from the upper or posterior wall of the canal. I take · it, in this case, the indications are plain to remove the bony growth as thoroughly as possible by means of the chisel or perhaps with forceps. Mathieuson has removed several of these bony growths from the auditory canal by taking a small drill and drilling a series of holes through the growth, then breaking and removing it in pieces.

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* Reported to the Louisville Surgical Society.

There has been more or less pain and sensitiveness about the left side of the head at different times since the enlargement began, but no continued nor severe pain. The ivory growths Dr. Ray has spoken of are much more commonly congenital and they do not usually increase in size very much; they grow only as the patient grows. This is a form of growth which is considered by the majority of writers as the result of irritation of some kind. Some attribute it to syphilis, some to rheumatism, some to gout. In the case before us the growth is purely one of the canal; I can get a small probe, by bending it, half way in the canal behind the growth.

CONTINUED REPORT.

This is the patient I presented at the last meeting.

After I showed him to the Society a sinus opened at a point near the external orifice of the auditory canal below, and was discharging freely at the time of the operation. Under chloroform I dissected the auricle loose, laid it forward and chiseled out the bony growth, keeping up thorough drainage by means of a strip of iodoform gauze. There has not been an untoward symptom, and there is now a free opening in the canal. A gauze drain is still *in situ*, although I think it is now hardly necessary. He will be able to resume his work in a few days. The growth was easily removed; a blow or two with a mallet and chisel and it came away very nicely.

Later: June 19th: Canal well open; drum head healed; there has been attic trouble; Schrofnel's membrane cicatricial; the enlargement of the side of the head, which some of the Fellows of the Society pronounced osseous degeneration of the tendons and muscles, has undergone no change.

How to Cure Rheumatism.*—* * * The treatment of rheumatism by hydriatic processes is based now upon an experience in practice during a period of six years. The plan which is pursued is satisfactory to the highest interest of the patient and the physician. It is something that is definite; it is reliable, and the gains that are secured in the progress of the treatment are real, and can be determined with an accuracy approaching true science. The only difficulty that is experienced in pursuing the hydriatic plan lies in the fact that it is considered by the patient and friends as novel, and therefore to be guarded against. Besides, the support of the profession is withheld, owing to misunderstanding, by reason of clinical inexperience, lack of actual knowledge, and doubt, which operates to the disadvantage of both the physician and his patient. It takes a great many clinical experiences to establish the courage of one's own convictions, and until belief is based upon many carefully conducted experiments, there is always room for a question whether it is right or wrong. The disposition is among clinicians to prove each point in practice and to lean toward conservatism. For my part, my courage is established, and the practice of hydriatics, according to my experiences, is now approaching a definite and scientific system of therapy.

For the purposes of clinical practice the gross symptoms of rheumatism are sufficient in all cases to determine the line of treatment. It is only where experiments for scientific purposes are instituted that differentiating instruments and chemic tests are employed. When first called to see a patient it is of course impossible in most cases to exactly determine, even to my own satisfaction, the precise nature of the affection. The first inquiries that are made of the patient refer to the general condition, followed by questions and examinations to determine the details concerning the physiologic functions. Inquiry is especially directed to the excretory system, with reference to the quantity of urine which is passed, the condition of the bowels, the appearance of the skin and the mucous membrane, and especially the state of the appetite, the kind of food taken, and the habits with reference to the nature and the quantity of fluids taken as drink. The temperature of the body, the movements of the pulse and the subjective symptoms of the patient, constitute a list of inquiries sufficient to determine the treatment. The physiologic requirement of the system is two litres of water per day. In no single instance of a case treated has this quantity been consumed by the patient prior to his sickness.

The treatment is begun by prescribing regular, definite doses of pure, soft water at frequent intervals. Each dose of water contains some harmless remedy to satisfy the notions of the patient and his friends. The amount of water which is prescribed at each dose is scientifically determined by the whole weight of the body, the age of the patient and the degree of the fever. Starting upon the basis of an average man, two to four litres of pure water is prescribed every day, in properly apportioned doses, to avoid mistakes and excessive use of water at any one time. If the patient were of seventy-five pounds weight my estimate would be that one and one-half to two litres of water would be absorbed per day with comfort and advantage. The next process in the use of hydriatics is irrigation of the bowels, if circumstances favor it. One teaspoonful of elixo, a liquid soap, is mixed with the water used for irrigations. Many cases have been treated by me, in which it was inconvenient or undesirable to practice irrigation of the bowels. It is, therefore, established clinically that while irrigation is in all cases an aid to treatment, still it is not indispensable.

The third hydriatic process is the use of water upon the surface of the body. If the patient is agreeable to direction and conveniently located, the full bath is recommended. The temperature of the water should be a few degrees below the temperature of the body. When the toilet room is inaccessible or it is inconvenient to remove the patient, three bathing processes are followed in my practice: First, sponging the body with water from a basin; second, the wet pack; and third, the use of my sprinkle bath. The sprinkle bath consists of cool water applied to the surface of the body, at intervals of two or three hours, during the day and evening, by means of a small sprinkle nozzle attached to the end of the tubing of a fountain syringe, which is suspended from a chandelier, bedpost or nail in the wall. Swelled and painful joints are packed in a compress of cold water until relief comes. Briefly speaking, the foregoing measures have availed in the treatment of rheumatism. The precise detail work must necessarily vary in every case. The food is immaterial; whatever is the most simple, the easiest to provide, and which is agreeable to the patient, is all that is required. Purposely the recital of cases has been omitted. Such recitals are tedious, and for this reason are omitted from this paper.

Country doctor: "What's wanted? Is your uncle worse?" Boy: "He be dead." Doctor: "Then I have done all I could for him."—*Twinkles.*

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* Dr. Elmer Lee, before the American Medical Association.

The New York Medical Times

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OF

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EDITORS:

EGBERT GUERNSEY, M.D. ALFRED K. HILLS, M.D

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REMOVAL.

The office of this Journal was removed, May 1st, to 180 West Fifty-ninth street, Central Park South.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 108 Fulton St., N.Y.

IMPRISONMENT FOR LIFE.

IT is not alone in State prisons that human beings are condemned to imprisonment for life. There is a group of islands in the East River appropriated to the sick, the criminal, and the destitute. On one little corner of North Brother Island, scarcely an acre in extent, there is a little colony of lepers, four in number, shut out from the rest of the world as securely as if they were within the stone walls of a prison. Through the long day and the longer night, left alone with their thoughts, alone with the memories of the past, with no hope for the future, except that which comes with death, can we wonder that every hope of life is annihilated, and the inevitable end is death? There are three other leper colonies in the United States; one near New Orleans, one just outside of San Francisco and one in Wisconsin. These men have committed no crime. They are simply sick, suffering from a disease which the old Levitical law pronounced incurable, its breath sowing the seeds of death, and its touch contaminating. And so they were driven out from the haunts of men, and left to perish, with every heart, in its selfish fear, closed against them.

N. P. Willis, in his picture of the leper cured by Christ, paints in graphic, yet truthful colors, the terrible fear among the people of this disease, a fear which closed the heart to pity.

"Day was breaking,
When at the altar of the temple stood
The holy priest of God. The incense lamp
Burned with a struggling light, and a low chant
Swelled through the hollow arches of the roof
Like an articulate wail, and there alive,
Wasted to ghastly thinness, Helon knelt.
The echoes of the melancholy strain
Died in the distant aisles, and he rose up,
Struggling with weakness, and bowed down his head
Upon the sprinkled ashes, and put off
His costly raiment for the leper's garb,
And with the sackcloth round him, and his lip
Hid in a loathsome covering, stood still
Waiting to hear his doom.
'Depart, depart, O child
Of Israel, from the temple of thy God!
For He has smote thee with His chastening rod.
And to the desert wild
From all thou lovest, away thy feet must flee
That from thy plague His people may be free.
And he went forth alone—not one of all
The many whom he loved, nor she whose name
Was woven in the fibers of the heart
Breaking within him, now to come and speak
Comfort unto him. Yea, he went his way,
Sick and heartbroken and alone, to die;
For God had cursed the leper."

This is a picture of the leper, the priest of the temple, and society in the first century of the Christian era. Has science done nothing during the nineteen centuries which have passed to define the true character of this disease? In the light of the present day the life-long imprisonment, the isolation which a civilized people have substituted for the old Levitical law, is a crime against humanity for which there is no excuse.

What is leprosy? A chronic specific bacilliary disease, sometimes like fibrous consumption, years in developing, characterized by neoplasms which develop in definite elective sites, especially the skin, mucous membrane, in the nerves, in the related lymphatic glands, and in certain viscera. When the leprous formation affects the skin, mucous membrane and corresponding lymphatic glands, the disease is spoken of as cutaneous or tuberculous leprosy. When the neoplasms are localized in the nerves, the terms *nerve, non-tubercular or anæsthetic leprosy* are employed. In this condition the diseased part is insensible to the touch.

The bacillus lepra first discovered by Hansen, of Bergen, resembles the bacillus tuberculosis, and are found in great abundance in all the lesions of leprosy, especially in the lymphatic system. The progress of the disease depends in a great measure upon the surroundings, climate, nutrition and hygiene. Morrow, who has made a careful study of the disease, says: "There is no infective disease which is so long in its incubation, so mild in its initial manifestations, so prolonged in its exemption from serious accidents, as leprosy. In anæsthetic cases its entire symptomatology for five, ten or fifteen years may be limited to a few erythematous patches and occasional neurotic pains. There is no disease of a necessarily fatal character, which grants its victim so long a lease of life." But this disease is not of a necessarily fatal character any more than pulmonary tuberculosis must of necessity have a fatal termination. Both, when the diagnosis was made with all the certainty of science, have recovered complete health upon change of climate, careful attention to diet and the general laws of health, without internal treatment.

Infection is communicated in the same way as in tubercular consumption and in syphilis, and there is no more reason why the victims of one disease should be banished from society and imprisoned for life than the other. Within the past ten years there have been in this city 51,718 deaths from phthisis alone, and 9,434 deaths from other tuberculous diseases, while syphilis, as destructive to tissue, and as loathsome in its ravages as the later stage of leprosy, shows a record during the same time of 1,354 deaths. During all this time two deaths only are recorded from leprosy, and in the 170 cases of leprosy among the Scandinavian population in the Northwestern States not a single case of contagion has ever been known among them.

The altogether erroneous ideas which seem to prevail even in civilized communities of the infection and even contagion of leprosy, which justifies the banishment of the victim from society, from home, to be imprisoned for life, a barbarous relic of the early days of the world, should have no place in any civilized community in the nineteenth century. We quite agree with Dr. Morrow in his excellent and exhaustive work on Dermatology, "that if a leper provides himself with a separate room, bed and board, he is practically innocuous, so far as contagion is concerned, especially in the early stage; and later on, when the tissues are broken so as to liberate with more freedom the bacilli, he can receive proper medical treatment in hospitals, in wards, in rooms specially provided for such cases, without any more danger to the other inmates of the hospital than is now experienced in syphilis or consumption." It has been shown within the last few years that leprosy is not an absolutely incurable disease, any more than phthisis. Dr. Impey, of the Leper and Insane Hospital at Cape Town, South Africa, asserts that a certain number of lepers in his institution have been self-cured; that is, in some individual cases the disease is cured spontaneously, from causes which work within the patient's system. Up to this time the self-cured cases have only been known to exist in an sthetic leprosy. These facts will be brought to the attention of the Congress on Leprosy, soon to meet in London, composed of representatives from most of the nations of the civilized world. The facts presented and the discussions of this learned body, will, without doubt, lead to important results in the prevention, suppression, treatment and possible cure of a disease which has for so long a time been looked upon as incurable. In the mean time, we respectfully suggest to our Board of Health to make careful inquiry whether the protection of the public health and the interests of humanity require the continuance of the leper hospital on North Brother Island under its present exclusive prison rules. Might it not be wise to remove this handful of leprous men to some of the other charity hospitals, where they might feel that they are not of necessity condemned to death, bringing the all important factor of hope to their aid; or at least take off some of the prison restrictions under which they now suffer, and which must make their every prayer one for death?

DIAGNOSIS OF TYPHOID.

It is not always easy to diagnose typhoid fever. The symptoms resemble malarial fever so closely, and other disorders arising from poisonous water or a tainted atmosphere, that the physician is often at a loss to differentiate between them, more especially as the distinctive symptoms given in the books as indications of typhoid are not always present, and when present are not by any means always indicative of the disease, however important they may be collectively. Gurgling in the right illiac fossa may be found in ordinary diarrhœa, and pain in the same place in appendicitis. The step-ladder temperature of the text book is about as often absent as present. The rose spots, so typical if present, are absent in at least a third of the cases.

According to the theories of Pfeiffer and Widal, who made the discovery of the influence of the typhoid bacillus upon the blood of the patient, a tolerably accurate diagnosis of typhoid fever is possible within twenty-four hours of the invasion of the symptoms. On the recommendation of Dr. Biggs, the pathologist of the Board of Health, the Board invite the profession to take advantage of the facilities at the command of the department, in aid of a correct diagnosis. Hereafter all the druggists, where antitoxin is sold, will have glass slides, between which physicians may place the blood of their patients when they suspect typhoid. These slides, properly labelled and identified, will be gathered by the employes of the department, and within twenty-four hours the bacteriologist of the Board will report whether the experiments confirm or disprove the suspicion of typhoid.

The investigations of Pfeiffer and Widal show that the blood of persons suffering from typhoid fever, either fresh or dry, when mixed with active cultures of typhoid bacillus, has the power of arresting the active movement of these organisms and of producing peculiar and characteristic actions of the bacilli. This reaction occurs early in the course of the disease, and continues during convalescence. It does not occur with other organisms than the typhoid bacillus, and it does not occur with cultures of the typhoid bacillus when the blood of persons suffering with other diseases is employed.

But there are other tests, not requiring so much skill of manipulation, which the physician with a little skill in laboratory work can test in his own office. The Ehrlich test, as improved by Dr. Green, of the University of Minnesota, in the *Medical Record*, is so simple, as being, though not in all cases positive, still of great value, and with but few exceptions correct. Solution A: Hydrochloric acid, 50; distilled water, 1,000; sulfanitic acid, q.s.; ad. sat., allowed to stand some days, with frequent shaking.

Solution B: Five-tenths solution of sodium nitrite in distilled water. Keep in a cool place in a black bottle, and renew every week.

Solution C: One part of solution B to 100 parts solution A, made fresh every day.

Test: Equal parts of solution C and the suspected urine are thoroughly shaken in a test tube, and from one to two cubic centimetres of ammonium hydrate allowed to flow gently down upon the surface. If the reaction is present, a beautiful crimson or carmine band appears at the junction of the ammonia and the mixture. Upon shaking, a pink tinge is imparted to the foam. The urine must be fresh and filtered, and taken in the height of the infection.

PATHOLOGY OF EPILEPSY AND OTHER CONVULSIVE DISEASES.

THIS subject is discussed by Dr. F. W. Langdon in a recent issue of the *Journal of Mental and Nervous Diseases* in the light of modern discoveries. Under four heads he enumerates what he considers a working hypothesis in the study of convulsions.

1. That epilepsy, the choreas and probably most convulsive disorders are the dynamical expression of an inhibitory insufficiency; not indications of an overproduction of nerve energy, nor explosions due to a molecular unstability, *per se.*

That the cause of this inhibitory insufficiency is to be sought for in the end brushes of collateral processes of various cortical neurons, the situation varying with the type of the disease, whether sensory, psychic or motor.

That the defect consists most probably in a *structural incompleteness* (small capacity, defective insulation, imperfect contact) or a *numerical deficiency*, or both, in the collateral processes of the neurons referred to.

Defective collaterals may favor occurrence of convulsions in two ways: (*a*) By impairing connection with other neurons (inhibitory storage), (*b*) By increased resistance to overflow currents, causing temporary overcharge of motor axis cylinders.

EPILEPSY.

A NEW treatment for epilepsy comes to us through the *Medicale*, which, in the hands of Bexhterepp, has either produced an entire cessation of the attacks, or diminished their intensity or frequency. Thirty or forty grains of the adonis vernalis is placed in five ounces of boiling water, and filtered. To this is added 150 to 170 grains of bromide of potash and from two to three grains of caffein. A teaspoonful of this mixture is given four times a day in water or sweetened milk. Adonis is known to act upon the heart as a stimulant or cardiac tonic, something after the manner of digitalis or strophanthus, as the drug increases arterial tension, and the potash acts upon the vaso-motor nerves. In combination it is possible they may produce a more positive action in controlling the circulation. Any suggestion looking to the relief of this *bete noir* of our profession will be gladly investigated.

DIPHTHERIA.

IN an article in *Pedriatrics*, Dr. Walker says: "From the standpoint of a general practitioner, I confidently expect to cure any case of diphtheria within forty-eight hours of the onset of the disease." In case the diagnosis is clear, he gives from 1,000 to 1,500 units at once of the antitoxin serum, keeping at all times the throat and nostrils clear with a spray of some antiseptic solution. At the end of twenty-four hours a second injection is administered, and another at the end of forty-eight hours, if necessary. In the serum, prepared by Parke, Davis & Co., a bulb contains a single dose. This serum he considers the most reliable in the market. No drug is given to influence the course of the disease. The bowels are kept open with calomel tablets ¼. Under this treatment it is seldom necessary to use alcohol.

NEW APPLICATION OF ELECTRICITY.

THE various anæsthetics hitherto used are tedious, and are sometimes attended with unpleasant results in the simple operation of tooth extraction. The *Boston Transcript* describes a little battery about as large as a cigar box, which the up-to-date dentist uses in extracting teeth. The battery has a queer little attachment called a vibrator—a short strip of metal fastened at both ends. When the current is on, the strip vibrates at such a rate of speed that it hums. The operator tunes it up with a tuning fork until it gives out the note A; then he knows that the current is just right. The person in the dentist's chair grasps the handles, which are connected with the battery by wires. At the same time the operator seizes his forceps, which are likewise on the end of a wire proceeding from the battery. He touches the tooth, completing the circuit, and instantly a local anæsthesia is produced. The tooth and neighboring gums are rendered, for a moment, insensible to pain, and out comes the tooth.

THE first annual dinner of the Alumni Association of the Metropolitan Hospital was given November 11th, at the Hotel Savoy. Twenty-six representatives of the different medical staffs which had been connected with the hospital during the twenty-one years of its existence gathered around a round table, whose exquisite service framed in the tapestried walls of the dining room formed a picture of beauty never to be forgotten. Dr. Bukk G. Carleton, in a few graceful and well-chosen words, outlined the history, and Dr. Charles McDonald, with incomparable wit and eloquence, brought out, as toastmaster, the bright and happy responses of the Alumni. It was a dinner successful in all its details, full of good cheer, brotherly love and happy memories.

THE United States Bureau of Education keeps the world in touch with the progress of educational institutions through its bulletin of information. We learn that the students in so-called regular medical schools, in 1883-84, numbered 10,600; in 1893-94 they numbered 17,601, an increase of 66 per cent. Students in Homœopathic schools in 1883-84 were 1,267; in 1894 1,666, an increase of 31.5 per cent., less than one-half of the so-called regulars. The Eclectic students numbered about the same for the two periods, 767 and 803, an increase of 4.7 per cent. These statistics do not show a corresponding decline of Homœopathic or Eclectic thought, but a general impression that the leading institutions of the old school are more thorough in biological, pathological and clinical teachings, through their greater facilities of age, wealth and hospital connections, and that they have also absorbed many of the leading ideas of the more modern therapeutics of the new schools. The dual action of drugs is now taught in all schools, less minutely, it is true, in the old than in the new, but sufficiently to establish the principle as the leading one in therapeutics, and making the dividing line less marked between the schools than formerly. The prevalence of modern methods of thought, scientific investigation and clinical instruction are bringing all schools up to a high standard of educational work.

AN investigation of the recent epidemic of typhoid fever in New Haven, says the *Yale Medical Journal*, in which there were 100 cases, showed that it came from milk from a farm where malarial fever was present. There were four cases of malarial fever on the farm, and across the road a typical case of typhoid. One of these cases assisted at the milkings, and the washings of the houses were thrown upon the ground, whose natural drainage ran into a well from which water was obtained to wash cans and which was found to be unfit for use.

DR. COOK, who was with the Perry expedition, says the Eskimo do not begin menstruating till they are eighteen or twenty years old, yet they have children at a much earlier age, and suggests that this is a proof that there is no necessary connection between ovulation and menstruation.

THE first commencement of the Training School for Nurses, Hahnemann Hospital, was held at the hospital on the evening of November 5th. Diplomas and a very beautiful badge in the form of a pin, were conferred on a class of six nurses by the Hon. Hiram Calkins, President of the hospital, with appropriate remarks. The exercises were interspersed with music, and short addresses were made by the Rev. Dr. Thompson, General Howard Carroll and Dr. Guernsey. In the trained nurses of the Metropolitan and Hahnemann Hospitals the profession will always be sure of efficient service.

ALETRIS CORDIAL is an admirable remedy as a uterine tonic, but there are stomachs so delicate as not to bear the carminatives in the cordial. In these cases the tincture of aletris can be given with benefit. The remedy will prove of benefit not only as a uterine tonic, but in those dyspeptic troubles attended by anæmia. In worn out women, in chlorotic girls and in anæmic men, especially if there is more or less colic, flatulence, with or without constipation or diarrhœa, the remedy will often prove beneficial.

BIBLIOGRAPHICAL.

William Wood & Co. have issued their "Medical Record Visiting List for 1897," with special memoranda for sixty patients a week. Twenty-nine pages are devoted to valuable information for daily consultation.

Diseases of the Skin. By George Thomas Jackson, M. D., with sixty-nine illustrations. Second edition. Lea Brothers & Co.

This very excellent hand-book has been thoroughly revised, and presents in small compass a vast amount of information.

P. Blakiston, Son & Co. have issued their "Physicians' Visiting List for 1897," with some improvements, which make it, so far as we can see, perfect. The sales of this little book in 1896 were 10 per cent. over those of the previous year, showing that the appreciation of the profession is increasing. No more convenient book can be found.

Dr. Horace Packard, of the Boston University Medical School, sends us a very interesting monograph of his surgical work during the past five years, which includes 1,387 operations, covering every department of surgery. There were fifty-five deaths, 1,184 recoveries, eighty-nine relieved and forty-two not relieved. The author quotes a large number of cases, giving steps of the operations, with outline of treatment and progress of recovery or fatal termination.

The *Medical Record* for October 31st contains a condensed description of the leading winter health resorts of this country. The article is written by Dr. McKay, of Chicago, and will prove a valuable help to the physician in recommending desirable homes for his patients during the winter.

The Practice of Medicine. By Horatio C. Wood, A.M., M.D., LL.D. (Yale), Professor in the University of Pennsylvania, and Reginald H. Fitz, M.D. (Harvard). Philadelphia: J. B. Lippincott & Co., 1897.

The construction of this work is simultaneously from the pathologic and therapeutic points of view of the practice of medicine, summarizing and analyzing the most recent discoveries in pathology and therapeutics, especially in connection with germ life. There is an originality and breadth of thought based upon scientific reasoning and a freedom from partisan bias which gives a peculiar value to the work.

The *Century*. The first installment of Dr. Weir Mitchell's new novel, "Hugh Wynne, Free Quaker," appeared in the November *Century*. The story purports to be an autobiography of an officer of Gen. Washington's staff and Gen. Washington is one of the characters. The story is not simply a work of the imagination, but presents a graphic picture of the Continental Army during the Revolution.

Wood's Medical Hand Atlases. Anatomical Atlas of Obstetrical Diagnosis amd Treatment. By Oscar Schaeffer, M. D. With 145 illustrations. New York: William Wood & Co., 1896.

This volume deals with the morphology of the female pelvic organs as the anatomical basis of the physiological and pathological basis of pregnancy. In dealing with anatomical conditions, the formation of diagnosis and general treatment, the author wisely abstains from a collection of general theories, but formulates only established doctrines corresponding to the most recent knowledge. It is needless to say the plates and typography of the work are all that could be desired.

Anatomy, Descriptive and Surgical. By Henry Gray, F. R. S. A new edition, thoroughly revised by American authorities from the thirteenth English edition. Edited by T. Pickering Pick, F. R. C. S., with 742 illustrations, many of which are new. Lea Brothers & Co., 1896.

It is simply necessary to announce a new edition of "Gray's Anatomy." Any attempt at review would be as much out of place as a review of Shakespeare. We can simply say that the work is fully up to date, and in illustration and typography a beautiful specimen of book making.

A Treatise on Obstetrics. By Edward P. Davis, M.D., Philadelphia Polyclinic and Jefferson Medical College. Illustrated with 217 engravings and thirty plates in colors and monochrome. Lea Bros. & Co., 1896.

The author states in his preface that it has been his aim to furnish a work in which both the science and art of obstetrics is fully set forth in accordance with the most modern results of investigation and experience. Obstetric surgery has received special attention, while the hygiene of pregnancy, parturition, lactation and recovery from labor have been treated in the minute detail requisite to protect the health of the mother and child. The disorders of infancy have also been included. The author has succeeded admirably in his task, and has given us a work of rare excellence.

Essentials of Physical Diagnosis of the Thorax. By Arthur M. Corwin, A.M., M.D., Demonstrator of Physical Diagnosis in Rush Medical College; Attending Physician to the Central Free Dispensary, Department of Rhinology, Laryngology and Diseases of the Chest. Second edition, revised and enlarged. Philadelphia: W. B. Saunders, 1896; pp. 200; 12mo.

This little book was originally published for the use of students, but its rapid absorption by the practitioner made it appear that a wider field had been reached, so the author, in this edition, has added to his revision of the text a section setting forth the signs found in each disease of the chest, thereby increasing its value to the general practitioner for post-graduate study. It will be found a useful hand-book.

Diet for the Sick. Contributed by Miss E. Hibbard, Principal of Nurses' Training School, Grace Hospital, Detroit, and Mrs. Emma Drant, Matron of Michigan College of Medicine Hospital, Detroit. Second edition, enlarged. Limp cloth, 16mo., 100 pages. Price 25 cents, postpaid. Detroit, Mich.: The Illustrated Medical Journal Co., 1896.

In this little book there is, besides the useful formulæ for "Sick Dishes," foods and cooling drinks for convalescents, quite complete diet tables for use in anæmia, Bright's disease, calculus, cancer, chlorosis, cholera infantum, constipation, consumption, diabetes, diarrhœa, dyspepsia, fevers, gout, nervous affections, obesity, phthisis, rheumatism, uterine fibroids. It also gives various nutritive enemas. The physician can use it to advantage in explaining his orders for suitable dishes for his patient, leaving the book with the nurse.

Twentieth Century Practice. An International Encyclopœdia of Modern Medical Science. By leading authorities of Europe and America. Edited by Thomas L. Stedman, M.D., New York City. In twenty volumes. Volume VII., "Diseases of the Respiratory Organs and Blood, and Functional Sexual Disorders." New York: William Wood & Co., 1896.

The present volume is the work of ten different authors, nine of whom are Americans. Herbert B. Whitney, of the University of Colorado, discusses the Diseases of the Pleura; Frank Riegel, of Gresser, gives an interesting article on Asthma; E. Fletcher Ingals, of Chicago, writes upon Hay Fever; E. Main, of Paris, upon Diseases of the Diaphragm; Diseases of the Blood are very ably handled in a treatise of 300 pages, by Alfred Stengel, M.D., of Philadelphia; Rachitis, by Jules, of Paris; Disorders of Menstruation, by Drs. Edward Cushing and Charles G. Cumston, of Boston; Functional Disorders of the Male Sexual Organs, by Charles Wallace, of New York; The Chemical and Microscopical Examination of Urine, by James W. French, of Cincinnati. All the articles are thoroughly practical and scientific.

The American Text Book of Physiology. By Henry P. Bowditch, M. D.; John G. Curtis, M. D.; Henry H. Donaldson, Ph. D.; W. H. Howell, Ph. D., M. D.; Frederick S. Lee, Ph. D.; Warren P. Lombard, M. D.; Graham Lusk, Ph. D.; W. T. Porter, M. D.; Edward T. Reichert, M. D., and Henry Sewall, Ph. D., M. D. Edited by Wm. H. Howell, Ph. D., M. D., Johns Hopkins University. Fully illustrated. Philadelphia: W. B. Saunders, 1896.

The literature of experimental physiology is so great that it is almost impossible for any one teacher to keep thoroughly informed on all topics. It follows as a matter of course that a collaborative work from the pens of men who have devoted marked attention to special subjects would possess fuller information in all its parts, and consequently be of more value than if the work was prepared by a single author. The several authors are all teachers of prominent standing in leading universities and colleges, and under the editorship of the distinguished professor in Johns Hopkins University have given us probably the most complete and authoritative work on physiology yet before the public.

Over the Hookah, the Tales of a Talkative Doctor. By G. Frank Lydston, M. D., Professor of Genito-Urinary Surgery in the Chicago College of Physicians and Surgeons; Professor of Criminal Anthropology in the Kent College of Law, etc. Sold by subscription only. Sent prepaid on receipt of subscription price. Cloth, gilt top, $4.00; morocco, full gilt, $5.00. The Fred Klein Publishing Co., Chicago.

This book of 618 pages is an elegant, unique and most beautifully illustrated volume, containing humorous and pathetic sketches, character studies, dialect stories, original verse and sentiment, combined with everyday medical philosophy. The illustrations are superb, and number nearly 175 and are all original, being drawn from the author's designs. Table of contents: Several Kinds of Doctors, Apropos of Several Subjects, How a Versatile Young Doctor Reported a Society Event, The Doctor Emulates Sandow, SeeingThings, The Rhodomontade of a Sociable Skull, A Martyr to His Passions, "Old Abe" as a Musical Critic—Negro Dialect, Poker Jim—Gentleman, Larry's Contribution to the History of Ireland—Irish Dialect, The Passing of Major Merriwether, Sprays of Original Verse. The text is written in classic style, is interesting, most amusing restful reading for the tired doctor, or his patients while waiting. The author is to be congratulated upon his genius.

The *Living Age*. This sterling weekly publication has given to the public for the past fifty-four years the cream of foreign periodical literature—not merely abstracts, but the entire articles, in the original language of the author. These articles are selected with great care, and include fiction and poetry, art, science and politics, history, biography and discovery. The *Living Age* places one in touch with the master minds of the literary world. We are glad to see the new volume (the 212th) will contain translations from the French, German, Spanish and Italian reviews and magazines; also a monthly thirty-two page supplement, containing readings from American magazines and new books. Subscriptions reduced from $8.00 to $6.00 a year.

A Treatise on Surgery. By American authors. For students and practitioners of surgery and medicine. Edited by Roswell Park, A.M., M.D., Professor of the Principles and Practice of Surgery and of Clinical Surgery in the Medical Department of the University of Buffalo; Member of the Congress of German Surgeons; Fellow of the American Surgical Association; Ex-President Medical Society of the State of New York; Surgeon to the Buffalo General Hospital, etc. Vol. II. Special or Regional Surgery. With 451 engravings and seventeen full-page plates, in colors and monochrome. Lea Bros. & Co., Philadelphia and New York, 1896; pp. 804; octavo.

This is the second volume of a great work upon surgery, by American authors, which comes to us promptly, as promised.

It is only necessary to look over the list of distinguished teachers in this department who have contributed to the work, to feel assured that the subjects have been fully and carefully dealt with, and in accordance with modern methods.

The effort has been accomplished both from a didactic and a practical standpoint, based upon a large teaching experience, thus assuring its usefulness to students, but the practitioner will find also the necessary guiding principles, as well as the practical detail of surgical science and art which he requires in his daily work. The illustrations, largely original, critically chosen, have been made unusually practical in the elucidation of the text.

The work is a comprehensive and authoritative expression of modern surgical knowledge, and will no doubt be appreciated by those for whom it is intended. These volumes, as a whole, form a splendid monument to the eminent gentlemen who have made them possible, and they will stand as a beacon light to the credit and honor of our country in the world of surgery. The physical part of the undertaking is all that could be desired.

A Text-Book of Materia Medica, Therapeutics and Pharmacology. By George Frank Butler, Ph. G., M. D., Professor of Materia Medica and Clinical Medicine in the College of Physicians and Surgeons, Chicago; Professor of Materia Medica and Therapeutics, Northwestern University, Woman's Medical School; Attending Physician to Cook County Hospital; Member of the American Medical Association, Illinois State Medical Society, Chicago Medical Society, Chicago Pathological Society, and Fellow of the Chicago Academy of Medicine, etc., etc. Philadelphia: W. B. Saunders, 1896; pp. 858; octavo. Price, $4.00 net.

This volume is dedicated to the medical students of this country, in the interest of correct knowledge of the nature and action of drugs, and the rational treatment of disease. It is intended as a clear, concise and practical text-book, as well as a hand-book for reference.

The author's arrangement, embodying the synthetic classification of drugs based upon therapeutic affinities, is thought to be philosophical and rational, and calculated to hold the interest of the student.

The consideration of some of the subjects is from an original standpoint which invites criticism, which will no doubt prove interesting and useful.

The profession, as a body, is slow to adopt new views, and is jealous of innovations upon well-trodden paths, but progress demands that we shall be charitable in our treatment of new propositions which may become the keystone of the arch to-morrow.

The physiological action and the therapeutic application of drugs, with the mode of administration, are thoroughly studied out, practically stated, and are worthy of consideration.

The practical portion is done from a higher plane, with a greater regard for truthfulness and the advancement of therapeutic precision than is sometimes vouchsafed in works of this class. The author has conscientiously aimed to lead the student to a careful selection of the means to be employed in the treatment of disease, and as such his efforts should be estimated. The book no doubt will find its way into the curriculum of many schools, and by its fruits it will be judged.

SOCIETY REPORTS.

FRENCH MEDICAL SOCIETIES.

ACADEMY OF MEDICINE.

President, M. Hervieux.

Agglutinative Substance in the Blood of the Typhic.—This session of the Society will certainly be numbered as one of the most important of the year. M. Dieulafoy read a detailed memoir by MM. Widal and Sicard upon the agglutinating quality of typhoidal blood. The agglutination of Eberth's bacilli in a culture of typhic serum is definitely proved, and this method of clinical diagnosis is employed daily. It is very interesting to study this agglutinating power in the different humors of the economy. The authors have proved this power in the serum of blisters, in pleural, pericardiac and peritoneal serosities, sometimes in the urine, and once or twice in human bile. Their researches with milk have confirmed the investigations of MM. Achard and Bensaude. With the fluids of the vesiculæ seminales, the saliva and cephalo-rachidian liquid, the results were negative, but on the contrary, they were positive as respected the tears and aqueous humor. The agglutinative substance seems to be of albuminoid nature. Filtration by Chamberlain's filter, which especially retains the albuminoids, in effect suppresses agglutination. M. Widal has studied very particularly the respective actions of serum-albumen, serum-globuline, of fibrinogen substance and of globulin. These substances once isolated, the agglutinative quality is restored to the primitive fluid and retained; in solution they abandon it and again fix it by precipitation. This is the established fact, which interests not only physicians, but also the chemist, who will perhaps find in the phenomena of agglutination a new reaction for the delicate study of albuminoid substances.

Supra-Annular Sphacelus in Strangulated Epiplocele.—The session of the Society was equally interesting from a surgical point of view. M. Peyrot reported a case of epiploic hernia that was strangulated and sphacelated. The sphaculus had affected not only the part situated below the strangulation, but also a large free fold of the epiploon above the hernial ring. After practicing kelotomy it became necessary to complete the operation bv laparotomy in order to extirpate the whole of the sphacelated portion that occupied the posterior face of the epiploon. In this case, the sphacelus is easily explained by the disposition of the epiploon. It was folded upon itself, its free border having contracted adhesions with its posterior face, but the adhesions were too recent for the establishment of vascular anastomoses. It was the lower fold that had become entangled in the hernia, and its epiploic vessels were strangulated at two points, at their entry into the hernia and their exit from it; thus was the intra-abdominal portion of the epiploon deprived of its blood supply and hence the sphacelation. In order to designate this form of sphacelation, M. Peyrot proposed that it should be denominated supra-annular, to show that the sphacelated portion was above the hernial ring that strangulated it. This case resembles that of M. Millard, in which the strangulation of the hernia was due to procidentia of the appendix vermiformis, and to the ring it formed around the intestine.

Investigation of the Changes Occurring in Chlorosis: Urological Researches.—The study of the nutritive changes in disease is daily of more and more importance in pathology. It enables us to penetrate to the very essence of life itself, to observe the phenomena occurring in the minute structure of the tissues, and thus to establish a rational therapeia. In his work upon this subject M. Setti repeats the actual knowledge upon the composition of the blood and the urine of chlorotics. From an examination of eight chlorotics, whose clinical history he reported, he gives the results of analysis of the blood and urine, and draws the following conclusions: In chlorotics the total quantity of phosphate, sulphate, uric acid, urea and of azote, is inferior to the normal. The chlorates are in normal quantity, and the ammonia exceeds it. The acidity of the urine is not altered, and these results prove that oxidation is diminished; the processes of fermentation and intestinal putrefaction are not exaggerated.

Why and How We Become Phthisical.—In a work eminently pract cal, upon the prophylaxis of tubercle, M. U. Gilbert addresses himself to the whole world, as well as to physicians. In the first part, after giving the history of the contagiousness of tuberculosis, the author passes in review clinical and experimental facts which demonstrate irrefutably the existence and danger of contagion. He then investigates the different ways by which tuberculosis gains entrance into the system, and what are the influences that diminish the power of resistance of the individual, and render him more liable to contract the disease. After studying why we become phthisical, the author asks how we become so. He forcibly puts in evidence the multiple agencies that serve to transmit and disseminate the malady, and this naturally leads to the consideration of its prophylaxis. Hygienic measures should especially be directed to everything that can affect the patient, and to all causes that are capable of transmitting the affection. Every age, every period of life in those who are predisposed, requires special care to protect them from the infection. Considerable space is devoted by the author to the treatment of tuberculosis by creosote, and the work especially recommends itself by reason of the innumerable facts gathered by him from all sources, and which he has co-ordinated and presented in their full value.

Of Fever in Tuberculosis and of Hectic Fever.—Notwithstanding the numerous works that have been published, the origin of fever still remains one of the most obscure pathogenic problems. The theories given by authors are also numerous, and vary with the general ideas that successively prevail. M. Mangin, in a very concise and judicious criticism, shows that, if in a great number of these theories there is some truth, yet they are capable of serious objections. With the aid of very original experiences, he has endeavored to solve this difficult and disputed problem. From personal observations, M. Mangin concludes that the fever of tuberculosis seems to be the result of multiple infections of the organism. These infections are not due to the direct passage of microbes in the blood, but to the toxines secreted by them. The fever caused by toxines secreted by the streptococcus and the staphylococcus is subject to violent excerbations, while, on the contrary, the tubercular form resulting from tuberculine would have mild remissions.

Microbic and Animal Toxines.—As we advance and penetrate deeper and deeper into the modes of microbic action as a pathogenic cause of disease, we recognize more and more the extent and importance of the role played by toxines in its production. But besides microbic toxines, other poisons are the result of cell life. From the moment that it is decided, says Prof. Gautier, that the direct causes of disease and of the return to health are to be found in the action of poisons, ferments and counter-poisons secreted by inferior beings, or by the organism itself, it is natural to inquire what these toxines, anti-toxines and ferments are, and to compel us to discover the secret of their intimate nature. No one is more capable than Prof. Gautier to decide this question, and to demonstrate its evolution and its future. He was the first to proclaim the production of toxines by living cells, and to establish by irrefutable proof, and upon a solid basis, this new era in science. The first part of his magnificent work is devoted to investigations of the general characters of ptomaines, chemically considered, of which he gives a complete list, and with precise details as to the different methods of extraction. Then follows a detailed study of each ptomaine, cadaveric or bacterial, and accompanying the cadaveric ptomaines that are slightly toxic or inocuous, there are others whose introduction into the organism may produce accidents of a grave character or even death itself. Such are the poisons derived from decayed meat, etc. The ptomaines of bacterial origin can be taken from pure cultures—streptococcus, staphylococcus and the pyocyanic bacillus—from pathological urine—epilepsy, eczema, rougeola, grip, pneumonia, typhoid fever, erysipelas, phthisis, cholera, tetanus. For each one of these ptomaines, Prof. Gautier gives the methods for obtaining it, and the result of the pathological phenomena produced by its injection into animals. The second part is devoted to leucomaines—physiological alkaloids of the tissues—following the same method as in the first part. After studying the leucomaines, Prof. Gautier describes their mode of extraction. Each group is then investigated, especially the most important leucomaines, such as creatine, creatinine, adenine, guanine, xanthine, lecithine, the leucomaines of urine, of the amniotic liquid, etc. The third part, by far the most important, is consecrated to the study of toxines. After a very interesting investigation of the place to which the toxines are entitled, and the chemical class to which they belong, Prof. Gautier gives their mode of extraction and their distinctive characteristics from the albuminoids and the poisons. Their origin and mode of action, their elimination, immunization and inoculation, the means of defense of the organism, phagocytosis and serotherapy constitute the most instructive chapters. At first Prof. Gautier studied the toxines extracted from different organs—muscles, liver, kidney and pancreas, the glandular juices and internal secretions—spleen, thyroid body and supra-renal capsules. The poisons of serpents, of batrachians, of fishes and insects, venomous blood and poisonous flesh come next, and the great work ends with a complete and detailed study of the microbic toxines of virulent diseases.

Ainhum and Leprosy.—M. De Brum, of Beyrouth, does not accept the opinion advanced by Dr. Zambaco, but admits with a large majority of authors who have had the opportunity of studying the two diseases, that leprosy and ainhum are two distinct diseases. Some cases of ainhoid mutilation in leprosy, and some rare cases of ainhum with constant trophic troubles are the principal arguments of those who favor the unity of the two diseases.

Albuminuria and Intermittent Diabetes in Neurasthenia.—M. Fovean de Courmelles: In a great number of cases of simple neurasthenia, I have proved the intermittent presence in the urine, sometimes of sugar and of albumin, and sometimes of sugar and albumin together, the sugar varying from 0 to 2 grammes, the albumin from 0 to 0 gr. 25. Neurasthenic chlorosis sometimes presents albumin in the urine. I have also shown intermittent albuminuria 18.1 in eczema and when cutaneous lesions disappear.

Adipose in the Development of Abdominal Herniæ.—M. Lucas Championnière: It is generally admitted that emaciation favors the formation of hernia. While that may be true, I regard the accumulation of fat as another potent cause of the formation of hernia of all kinds. The fat that accumulates around the rings is, in the living, in a semi-liquid state, and tends to force the abdominal orifices, dragging along with it the peritoneum under pressure of the viscera. This theoretical view is confirmed by so many facts as to involve important consequences in the prophylactic and even palliative treatment of hernia. In young subjects obesity should be prevented by physical exercise, and by appropriate alimentary regimen and hygienic precautions. So much greater the necessity for watching carefully the eventations that the accumulation of fat surely produces after operations in abdominal surgery. Indeed, it becomes obligatory not to operate upon the young obese until a notable amount of emaciation has been obtained. By using this precaution I have been able to prepare subjects for operation in whom it would have been useless or even dangerous. In fine, the therapeutic treatment of obesity is a great help to those in whom an operation would be inadmissable. I would add that even in the course of a radical cure the special anatomical conditions of the exuberant fat, filled as it is with vessels of importance, should not be forgotten. The results of the operation, and certain complications, are often due to ignorance and neglect of the anatomical conditions.

M. Tillaux: I agree with M. Lucas Championnière, but I believe that his views are not as unknown as he thinks. Rozère has already described the mechanism of the production of crural hernia by the engagement of a mass of fat in the ring, which distends it, and draws down, first the epiploon, then the intestine. It is the same with nearly all forms of hernia, except the congenital inguinal.

SURGICAL SOCIETY.

Rectal Dilatation.—M. Berger congratulated M. Reclus upon having become one of the defenders of dilatation for contraction of the rectum. In many cases this method has given excellent results, especially in contractions called syphilitic. M. Berger insists upon proceeding slowly and upon a particular manipulation, which indicates that there is certainly a spasmodic element in these contractions. Dilation acts only upon the stenosis, and not upon the rectitis itself, and with it should be associated intra-rectal injections of a solution of the nitrate of silver; permanent drainage of the rectum may give success. Dilation has counter-indications, particularly febrile accidents accompanied with pains, indicating an access of infection with chills, peritonism, etc. The process should be avoided in patients that are very feeble. In them posterior rectotomy is the only resource. When rectal suppuration is very abundant, and pain very intense, dilation does not suffice, and equally so when the contraction is situated very high up. Under such circumstances it is better to practice posterior rectotomy than extirpation of the contraction. Although this is a palliative operation, it is preferable to ablation, which has heretofore given unsatisfactory results.

M. Quenu: Whatever means may be employed, syphilitic contraction of the rectum still continues beyond the resources of medical and surgical art. M. Quenu thinks that in serious cases artificial anus is the operation that gives the best results; rectotomy, on the whole, is not encouraging. The necessity for extirpation sometimes recurs, that is certain, but patients often derive real benefit from it. In limited cases this intervention is perfectly admissible. M. Reynier agrees with M. Berger; he recalled Gosselin's method, which had been followed during thirty years, and which seemed to demonstrate the pathogenesis of syphilitic retraction of the rectum. M. Schwartz employs dilation, rectotomy and colostomy. M. Reclus insisted upon the real difficulties of progressive dilation. But they are very much diminished by previous use of cocaine, and, thanks to the application of this remedy, he is enabled to report rapid and satisfactory results.

Serotherapy of Typhoid Fever.—The marvelous results obtained by Behring and Roux in diphtheria, have given an impulse to numerous serotherapic researches. M. Funck, director of the Serotherapic Institute of Brussels, has especially devoted himself to typhoid fever. The memoir which he has published upon this subject is a complete monograph of the typhic bacillus and its toxine. To the works already published M. Funck adds numerous and delicate personal experiments. From them, he concludes that the serum of animals immunized by means of typhic cultures, possesses all the properties recognized in the anti-choleraic serum of Pfeiffer, to wit: That in small doses it protects against typhic infection, but not against infection by the bacillus coli. He believes in the therapeutic action of this serum, but thinks that as yet he should confine his experiments to the laboratory upon this subject, and that the typhic serotherapic method is not sufficiently perfect to be tried upon man. This prudent reserve does all honor to M. Funck, and should serve as an example to numerous bacteriologists who are too much inclined to regard their desires as realities.

The memoir of M. Funck ends with a chapter upon the pathogenesis of typhoid fever. According to him, the typhic bacillus, when introduced into the intestine, pullulates, and engages in a contest with the phagocytes, and the destruction of the bacilli by the latter sets free the toxine contained in the bacilli themselves. From a profound and critical study of numerous statistical works upon the serotheraphy of diphtheria also, M. Funck draws the following conclusions: 1. Serotheraphy notably diminishes the mortality of diphtheria 2. The action of the serum is evident in certain forms of diphtheria, and not of the mildest, and surpasses that of all other remedies. 3. The effect of the serum is more apparent in the three first days of infection. 4. The propagation of the disease to the larynx is often prevented. 5. It is the same with the septic infection. 6. Serotherapy seems to greatly diminish cardiac, renal and nervous accidents. 7. The effect of the serum is especially remarkable among the young. 8. Its harmlessness is absolute. 9. There exists a clinical form of subacute diphtheritic poisoning, in which the serum has a local action, but without influencing the general conditions.

Serotherapic Treatment of the Poison of Serpents.—M. Calmette has given a succinct history of the poisonous serpents of the globe. India and Australia are especially infested. The poisons of the different species are analogous, and the effects they produce proceed from a toxic action upon the bulbus. MM. Phisalix and Bertrand have noted the attenuation of the poison of the viper of the Jura by heat. M. Calmette has repeated their experiments, and has since tried the action of different chemical substances upon these poisons. The permanganate of potash, water with bromine in solution, alkaline hypochlorites and chloride of gold are the chemical bodies that most easily destroy the action of these poisons. For treating the bites, M. Calmette advises the use of a watery solution of the hypochlorite of lime, 1-160. Following the experience and counsel of M. Roux, he has applied serotherapy to the treatment of the toxine of venomous serpents. His experiments have been conclusive, and he has established at the Pasteur Institute, of Lille, a department of anti-venomous serum whose excellent effects are no longer doubtful.

MEDICAL SOCIETY OF THE HOSPITALS.

Serodiagnosis of Typhoid Fever.—M. Widal has proved that during convalescence from typhoid fever the agglunative reaction of the serum upon cultures becomes attenuated and even disappears. In a patient who was gravely affected the disappearance did not occur until the end of six months. His researches have been directed to the inquiry as to the relations existing between the bactericidal power and the agglutinative property. Stern declares that the bactericidal power disappears during convalescence. The experiments instituted by M. Widal permit the conclusion that the bactericidal power is variable. In his opinion immunity exists especially during convalescence, and the agglutination manifests itself especially during the period of infection. M. Catrin stated that his own numerous investigations confirmed absolutely the results obtained by M. Widal. M. Rendu asked if the agglutinative phenomena presented any modifications in the relapse of typhoid fever. M. Catrin was not certain upon that subject. M. Achard had occasion to observe that the agglutinative property increased at the time of relapse.

Women Who Smoke Tea.—The part played by the fair sex in railway smoking cars seems to be purely of a contemplative character. But it is much more effective and practical "at home," if we consider that, not content with tobacco, there is a habit among women of smoking cigarettes of green tea. In England, says the *Saturday Magazine* this is the latest fad among women of fashion, and cites the case of a literary woman of London who smokes no less than from twenty to thirty tea cigarettes daily. This is the habitual custom now at 5 o'clock teas. After all, this is certainly better than the horrible habit of morphine injections, for it is estimated that a tea smoker, even to excess, may smoke 900 grammes of tea per week without being brutalized by it, But the practice leads to insomnia, to neurasthenia, and other dangerous effects. As to cigarette smoking, it is much better to smoke good tobacco, and not too much of it, both necessary conditions to a continuous practice of this small and harmless folly.

Can the Force of the Imagination Produce Conception?—There exists, among the Archives, under the rubric "A. D. T.," a collection of edicts, ordinances, royal declarations and notable arrests of the Councils of State or Parliament, most of them printed, some in manuscript, comprehending 100,000 detached papers classed in chronological order. In one of the compartments containing these documents, there figures at the date of February 15, 1637, a contest before the Parliament of Grenoble, between a lady, the wife of an officer, whom she had made a father, although she had not seen him for many years, and the brothers of the officer, who brought an action to disprove the paternity of the child. The wife deposed that she had had no relations with her husband, who was an officer in command of a regiment in the Lower Country (Pays-Bas), for three years. But she alleged that *she had conceived through the force of imagination.*

Upon this, continues the account of the arrest, the matter was brought up for deliberation, and the court decided that, in effect, the force of the imagination was sufficient to produce conception. The child was therefore declared to be legitimate, thus defeating the purpose of the brothers and imposing upon them expense. One would think that such a burlesque, in such a place, and clothed with all the characteristics of authenticity, would in its turn cause a "conception" of a singular opinion of the way in which our old sovereign courts rendered justice. The most curious feature of this case is that under Louis XIII., contemporaries of that period were attracted by it, and the arrest found defenders, and the question whether the force of the imagination was sufficient to produce conception was agitated even in the medical schools.

A reader of the *Temps* has communicated the following extract from the "Archives de l'Isere," relative to a decree attributed to this Parliament, declaring legitimate a child conceived through the imagination, three years after the death of its father, 1635–1640, declaring as false, suppositious, caluminating and injurious to the honor of the court a decree which was printed and sold at Paris, and by which this court, upon the attestation of matrons and physicians declaring the thing to be possible, had established the legitimacy of a child conceived, upon the word of the mother, in a dream, in which her husband, who had been dead for a long time, had appeared to her; and, moreover, that the document should be torn up and burned in a public place before the palace, and all printers, booksellers, libraries and others connected with printing should be prohibited from buying or selling it under penalty of their lives, etc., etc. The Mussulman law, always accepted among the aborigines of Algeria, admits undisputedly the fact that a woman may carry a child within her womb for five or six years, and for which reason it, the child, is called, "Bou-Regoud"—that is to say, it sleeps within the belly of its mother.

J. A. C.

In cases of influenza seen early, especially those presenting pleurodynia or pleuritic symptoms, Dr. S. Solis-Cohn (*Phila. Polyclinic*) administers the following prescription:

Solol	3 grains.
Terpin hydrate	3 grains.
In powder or capsule.	Mix.

One powder or one capsule is given every two, three, or four hours, according to the indications of the case, and this treatment is kept up for from twenty-four to thirty-six, or even forty-eight hours, according to the progress of the symptoms and of lesions, in case the pleura or lung be involved. In the latter case strychnine sulphate from 1-100 to 1-30 of a grain, according to the frequency of administration and the urgency of the symptoms, is combined with it. If cough is sufficiently troublesome to require sedatives, codein (from $\frac{1}{20}$ grain to $\frac{1}{10}$ grain) is likewise added. Codein is especially useful in cases of pleurisy, not only relieving pain, but also seeming to have a certain controlling influence upon the inflammatory process. Its value in inflammation of serous membranes is well-known, and is, of course, the explanation of the latter fact.

TRANSLATIONS, GLEANINGS, Etc.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills, M.D., Fellow of the Academy of Medicine, New York.

Hydrozone in Gastric and Intestinal Disorders.—Says Dr. John Aulde, in the *New York Medical Journal* for August 15, 1896: "A period of nearly twelve years has elapsed since I first began the clinical use of hydrogen dioxide. In the present communication it is my object to direct the attention of the profession to its special value in the treatment of gastric and intestinal disorders. In gastritis, for example, there is no antiseptic which can be given with so much benefit as this remedy, because its effect is immediate, and even in considerable doses it is absolutely harmless. The same is true in regard to its employment in typhoid fever, cholera infantum and Asiatic cholera. In the latter disease its efficacy has been thoroughly demonstrated by a number of well-known physicians, and its applicability in cholera infantum is well known to those physicians who have given careful attention to the most modern methods in the treatment of this class of cases.

"The following brief notes will be sufficient to indicate the availability of this remedy in the treatment of the disorders already mentioned, although, in view of the fact that hydrozone is a more concentrated product, and withal a permanent solution, this latter remedy should have the preference. It contains at least double the volume of nascent oxygen which has heretofore been the standard for the medicinal peroxide of hydrogen.

"In gastritis, either acute, subacute or chronic, we have to deal with an unhealthy condition of the lining membrane of the stomach. The inflammation is attended with an increased output of mucus, which seriously interferes with the normal functions of the peptic glands. By the introduction of a small quantity of hydrozone, in the strength of 1 part to 32 parts of boiled or sterilized water, this objectionable mucus is at once destroyed by the action of the oxygen which is released, and the contents of the stomach remaining are promptly discharged into the small intestine. A patient suffering from gastritis should take at least half an hour before meals from 2 to 4 ounces of diluted hydrozone (1 to 32) and lie on the right side, so as to facilitate the action of the stomach in discharging its contents.* The antiseptic properties of hydrozone thus used are sufficient to destroy the micro organisms and leave the stomach in a healthy condition for the absorption of nutritive pabulum. All forms of fermentation are promptly subdued by the active oxidation resulting from the liberation of nascent oxygen. The patient is then in a condition to take suitable food, which should be nutritious and easily digested, liquids being preferred until the active symptoms have subsided. Later, small portions of solid food can be ingested, but all food stuffs of a starchy character must be thoroughly masticated, in order to secure the action of the salivary secretion upon the starch granules, breaking them up, and lessening the tendency to fermentation in the stomach. After taking a meal, a patient with gastritis should follow it with medicinal doses of glycozone, which contain, in addition to the nascent oxygen contained in hydrozone, a percentage of glycerine which favors osmosis and assists in re-establishing the functional activity of both the peptic and mucous glands of the organ.

"In the treatment of cholera infantum, typhoid fever and Asiatic cholera, the same general plan should be adopted in dealing with the stomach, always bearing in mind the necessity for having the patient remain in the recumbent position and on the right side for at least half an hour after the ingestion of the solution. In addition, however, to the preliminary treatment of the stomach, the same solution (1 to 32) is used as an injection into the lower bowel, care being exercised to insure its introduction as high up as possible. This can be managed by having the patient lie on the left side, with the hips well elevated, and the employment of a long, flexible rectal tube. In this manner we secure and maintain an antiseptic condition in both the stomach and large intestine, the importance of which will be understood when we consider the large number of micro-organisms which grow under these favorable conditions with such remarkable rapidity.

"When deemed advisable, the solution introduced into the lower bowel may be combined with large quantities of either hot or cold water, which enables us to obtain the benefits of irrigation in addition to the antiseptic effects. These irrigations may be employed as frequently as deemed advisable by the medical attendant, but they will usually prove satisfactory if administered at intervals of four hours."

Naso-Pharyngeal Catarrh.—Glyco-Thymoline is an alkaline antiseptic, non-irritating, cleansing solution, for treatment of affections of the nasal mucous membrane, which, when applied with Dr. Bermingham's douche, obviates danger to the middle ear. We have found this preparation most useful for the purpose intended, and when we realize the results that may obtain from the use of the ordinary nasal douche, or from snuffing liquids into the nose, we ought to appreciate Dr. Bermingham's effort in giving us an instrument both safe, effective and, withal, *cheap*.

Clinical Observations Upon Trional. (By Dr. J. B. Busdraghi, formerly assistant to Prof. C. Lombroso.)—This is a white transparent substance, of slightly bitter taste, soluble in 320 parts of cold water and a little more readily soluble in hot water. It may be administered in a watery solution, in cachets or in other vehicles, in a daily dose of ¼ gramme.

We sought to employ it in cases in which sulfonal had failed or caused some disturbance. Our investigations bore upon ten subjects; four children less than ten years old, three men and three women.

Trional was well borne in all the cases in which we employed it, showing prompt and safe hypnotic action.

It occasionally happens that a patient is unable to take it, as it may cause nausea, and, in rare instances, vomiting. For this reason it is best to give a fairly active purgative before the trional, which must only be administered an hour or two after eating.

It is also necessary to select light articles of food, avoiding salads, salt fish, dried fruits, etc., and especially iced or alcoholic drinks. It may be given, as we have already suggested, in wafers; it is good practice, however, to follow it with a couple of cups of infusion of linden or of chamomile, quite hot.

The use of trional may be continued for a long time, since harmful effects are never, or at least very seldom observed. In all cases it is well to give at the same time some of the gaseous mineral waters, such as seltzer or apollinaris. In Spain such waters are abundant in nearly all the provinces.

Sleep occurs about half an hour after having taken the medicine; it is quiet, placid, perfectly similar to physiological sleep; the pulse and respiration, which before were restless and nervous, are quieted. It lasts for six or eight hours, giving the patient a sensation of well-being obtained with no other hypnotic.

In neurasthenia and the nervous disturbances of pregnancy we had already given chloral and sulfonal with negative or with harmful results; trional, on the contrary, gave satisfactory results.

Even in anæmia it was given with success, being well tolerated, and without the phenomena observed with sulfonal.

From what we have stated we conclude that trional is the best hypnotic known, and that it may be prescribed both in children and in weak and nervous persons, with confidence in the results and without fear of damaging after-effects.—*Correspondencia Medica, No. 25, 1896.*

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* In chronic cases with a large output of gastric mucus, and particularly in gastric ulcer, concentrated solutions are not well borne at first, owing to the formation of oxygen gas, but this difficulty disappears with the continued use of the remedy, and no treatment of gastric ulcer can be regarded as complete without the local employment of hydrozone.

RETROSPECTIVE DIETETICS.

Diastase in Dyspepsia.—In these days of progress it is gratifying to know that cases of amylaceous indigestion which have so frequently baffled us can now be treated with a reasonable hope of success. For many years we have been looking for a diastase more potent than that found in the malt extracts, some of which have appeared to be of questionable value. It remained for Mr. Takamine, a Japanese chemist, to discover one of remarkable amylolytic converting power. In this product, taka-diastase, we have what the profession has so long desired, and it is, therefore, not remarkable that many of the best men in the profession have investigated it, and the conclusion uniformly reached is that in cases of inability to digest the starches we have in this ferment a reliable method of treatment.

Dr. George Tucker Harrison, of New York, says that we may prescribe this remedy in such cases with confidence that the relief will be decided. Dr. Harrison has used this new product in quite a large number of cases with uniformly good results. The first case he used it in was that of a lady who had been for a long time a chronic dyspeptic. She had been treated in various ways; by dieting, pepsin, pancreatic extracts, nux vomica, with ox gall, etc., but none of these methods of treatment gave her any appreciable relief, whereas the result from the use of taka-diastase was prompt and satisfactory. The flatulence, eructations, constipation and general debility disappeared.

As taka diastase is so energetic in its action the consensus of opinion seems to be that about two or three grains administered at meal-time is sufficient in ordinary cases.

NOTES ON DIAGNOSIS.*

Diagnosis of Primary Cancer of the Trachea.—Dr. R. Oestreich describes three cases of primary cancer of the trachea. In two only a simple stenosis was diagnosed during life. The diagnostic signs are the symptoms of tracheal stenosis, the associated cachexia, the tracheoscopic picture, involvement of glands, the absence of primary carcinomatous affections in neighboring organs, as well as of syphilis and tuberculosis. Paralysis of the recurrent laryngeal nerve may also be an accompanying symptom, in which case a differential diagnosis between aneurism of the arch of the aorta would necessarily have to be made. This is a disagreeable complication, as it obscures a view of the trachea.—*Muenchener Medicinische Wochenschrift, No. 44, 1895.*

Rhythmic Nodding of the Head in Aneurism of the Arch of the Aorta.—Dr. Teletti, in two cases of aneurism of the arch of the aorta, has observed a rhythmic nodding of the head to be present, which appeared to be synchronous with the heart beat. These movements were to be augmented in intensity by having the patient throw his head back. This symptom he ascribes to downward traction of the left bronchus and trachea during the systole. It must not be confounded with regular muscular contractions nor the rhythmic nodding of certain nervous diseases.—*La Semaine Medicale, No. 55, 1895*

Chorea in Heart Diseases.—Dr. Massolongo, in two cases of heart disease, associated with chorea, discovered at the necropsy a diffuse and extensive arteritis of the cerebral arteries, a moderate degree of œdematous infiltration of the brain-mass, a thickening of the meninges, notably of the dura mater, and adhesions, not only between the membranes themselves, but to the cortex as well. These findings led him to conclude as follows, with regard to the pathology of chorea in heart affections: A heart disease associated with a more or less advanced interstitial nephritis, with renal incompetency and a consequent auto-intoxication, arteritis of the cerebral arteries, œdema of the brain, irritation of the motor zones, facilitated and brought about by the adhesions between the membranes and the cortex. Therefore, in heart disease one may observe certain nervous symptoms which resemble an ordinary chorea, but which are due to anatomical lesions of the nerve centers.—*Ibidem.*

Cerebral Spastic Paralyses in Children.—Dr. Ganghofner states that in children there is a whole series of cerebral alterations which are capable of setting up spastic paralyses, contractures, increased reflexes and all those motor disturbances which are known under chorea, athetosis, ataxia, concomitant movements; which, synthetically, are known as posthemiplegic disturbances. They are characteristically associated with arrest or changes in the child's development, especially of the extremity, epilepsy, and with more or less profound alterations of the intellect.

Clinically, a number of distinct morbid pictures are observed, according to the seat and extension of the lesion, and as the process be stationary or has a tendency to progress. Thus, there is a general spastic condition of the extremities (Little's paralysis) cerebral infantile paralysis or cerebral spastic infantile hemiplegia, chronic chorea, and athetosis of children. Ganghofner calls attention to a spastic infantile paralysis where he thought the usual symptoms of chronic hydrocephalus were absent, yet it is dependent upon a chronic internal hydrocephalus. He cites a case in illustration.—*Lo Sperimentale, No. 29, 1895.*

Diagnosis of Senile Epilepsy.—Prof. Naunyn, of Strassburg, calls attention to a variety of epilepsy which is observed in old persons who are either affected with arteriosclerosis of the cerebral arteries or a heart lesion, and which disease much resembles essential epilepsy. Therefore, this state is dependent upon an insufficient flow of blood to the brain. These patients are frequently addicted to alcohol. The epileptic seizures are dependent upon cerebral anæmia. They may recur several times a week, and are accompanied by loss of consciousness and clonic convulsions. The attacks are of short duration, and are associated with slowness of the pulse; such a seizure may be artificially produced by compression of the carotids. Then, in thirty to sixty seconds, the muscles of the mouth begin to twitch, then those of the hands and eyes are involved, and the subject loses consciousness. The extremities are thrown into convulsions (clonic), the pupils dilate, respiration becomes stertorous and the pulse may fall from eighty to forty-eight. It is quite necessary to distinguish this variety from the essential form of epilepsy, as the usual treatment by the bromides will either be positively injurious or of no effect. A heart tonic is here necessary.—*La Semaine Medicale, No. 54, 1895.*

The Diagnostic Value of Œdema as a Symptom.—Dr. B. Beer, of Vienna, in a recent paper read before the Vienna Medical Club, directs attention to the practical importance of those forms of œdema which are not dependent upon disturbances of circulation or chronic nephritis. A variety of œdema in the superficial layers of the skin is observed where the patients complain that the pressure of the clothes, etc., causes a temporary and superficial œdema, which with parœsthesia, remains for quite a while in the skin In certain exanthems, dermographismus and urticaria, these appear more distinctly and extend into large patches. The skin may be thrown into folds after they have disappeared. More deeply seated œdema of an inflammatory origin may be due to pus formation, where with formation of but a small pus focus the œdema may be extensive.

In the subcutaneous cellular tissue or the perimysium from toxic influences considerable œdema may be noticed, as with dermomyositis, but without apparent pus formation. These may be followed by absorption of the fluid, formation of fat or cellular tissue, with consequent cicitricial retraction, which is most distinctly observed in scleroderma. Sometimes these retractive cicatricial bands lead to the imbedding of fat, with simulation of lipomata. By this same process affecting the muscular tissue an apparent muscular atrophy is produced, which will disappear under treatment by massage. A still more serious termination is the formation of the cutis laxa and the cutis atrophica of the dermatologists. The writer called attention to a case which he had observed where a partial acromegalia had developed after a fall upon the right arm; an œdema of a gelatinous appearance had developed upon the face, chest, etc., which disappeared after the administration of alkalies and treatment by massage. The cause of œdema is frequently to be sought in a derangement of the lymph currents.—*Muenchener Medicinische Wochenschrift, No. 54, 1895.*

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* From the French, German, Italian, Austrian, Danish and Swedish journals. By F. H. Pritchard, M.D., Weaver's Corners, O.

Right-Sided Œdema in Hepatic Disease.—Prof. Hanot in recent years has had opportunity to observe two cases of right-sided œdema associated with affections of the liver, the one patient with a cancer of the liver, and the other with an atrophic cirrhosis of that organ. This year he has also seen two female patients with hepatic diseases who presented this symptom. There seemed to be no relation between this œdema and prolonged decubitus upon the right side. In certain liver as well as kidney diseases one may observe an œdema limited to one side of the body.—*La Semaine Medicale, No. 54, 1895.*

Melanosis of the Skin from Arsenic.—Dr. Schlesinger recently presented before the Medical Society of Vienna a man who had received Fowler's solution for some time on account of a lympho-sarcoma of the axilla, and who, in consequence of this treatment, had developed a dark coloration of the skin. After taking the remedy for a second time for a new crop of enlarged glands, the discoloration of the skin became aggravated more and more until it was nearly black. Melanosis from arsenic is by no means rare; sometimes it sets in rapidly, even in fifteen days after commencing the drug. Sometimes it is preceded by a scarlatiniform exanthem. The mucous membranes are never affected. If the remedy has not been continued too long the discoloration will disappear on discontinuing the drug.—*Ibidem.*

A Rare Variety of Vicarious Menstruation.—Dr. Oswiemcinski has observed a rare form of vicarious menstruation, where a female, menstruating first in her eighteenth year, married at the age of twenty-four. After a childless marriage of ten years her husband died. Three months before his death her menses disappeared for the first time, while at the same time a colossal swelling of the right mammary gland appeared in their stead. A large quantity of colostrum could be pressed out. At the same time there were pains in the breast which radiated into the arm. These symptoms lasted for three days and gradually disappeared, to reappear every month in place of the regular menses. The left breast was unaffected. He has observed this peculiar phenomenon six times.—*Wiener Medizinische Presse, No. 42, 1895.*

Diagnosis of Thrombosis of the Cerebral Sinuses After Suppuration of the Middle Ear.—Dr. A. Jansen, of Berlin, in twelve cases of thrombosis of the cerebral sinuses after suppurative affections of the middle ear, has observed recovery to follow in five cases. The chief dangers are purulent arachnitis and metastases into the lungs. The latter are twice as frequent in thrombosis of the jugular vein as in that of the transverse sinus. Uncomplicated sinus thrombosis, if it does not disintegrate, or if this occur and it be protected by a wall of granulation from the blood current, and it be excluded from the arachnoid, then may pursue a course devoid of alarming symptoms beyond violent headache. Only by extension of the process or involvement of neighboring parts, or by metastasis, are symptoms set up. These latter are pyæmic and septic fever with rigors, metastases, optic neuritis, symptoms of meningitic irritation, which are brought about by extension of the thrombosis into the jugular vein, the cavernous sinus, the emissarium of the mastoid process or the torcular herophilii, and especially by perisinous abscess. Purulent affections of the mastoid, as a rule, pursue an afebrile course, especially cholesteatoma, which most frequently leads to sinus thrombosis. Even very large collections of pus and extradural abscesses in adults give rise to no fever. Only acute inflammations of the mastoid in the beginning are associated with fever, but when phlebitis of the sinus sets in it has already disappeared, and it runs a course unaccompanied by rigors. Therefore, a pyæmic fever with rigors, and especially with repeated rigors, should make one suspicious of a sinus thrombosis. The presence of metastases is a still greater confirmation of the diagnosis.

Optic neuritis appears to be entirely independent of the cavernous sinus, in spite of the generally accepted theory. In this respect he regards disturbances of the intracranial circulation as having but little influence; on the contrary, he holds a filling of the arachnoid with fluid to be more the cause.—*Medicinische Neuigkeiten, No. 38, 1895.*

The Detection of Rhubarb (Rheum) in the Urine.—Dr. Proksch, referring to the well-known fact that the urine, after the administration of rhubarb, is capable of reducing an alkaline solution of bismuth and tartaric acid so as to give a positive reaction for sugar, has devised four reliable tests to detect presence of rhubarb in the urine.

1. Hydrochloric acid is added to the urine, it is then shaken with xylol, and then caustic potash is dropped in. A rose-colored ring, in five to ten minutes, appearing at the place of contact of the two solutions, indicates rhubarb.
2. Treated in the same manner, but shaken with chloroform instead of xylol, causes a violet-colored ring to appear.
3. Shaken with a solution of sulphuric acid and then with chloroform, when the layer of chloroform, after addition of a solution of caustic potash, presents a rose-colored appearance if rhubarb be present.
4. Shaken with sulpho-anilic acid and then with xylol, the lowermost portion of the fluid assumes a wine-colored tinge, while the xylol remains beautifully rose-colored.—*Norsk Magazin for Laegevidenskaben, No. 10, 1895,*

Diagnosis of Ectopic Pregnancy.—Dr. D. von Ott states that swelling of the uterine tissue in the vicinity of the internal os uteri, so important for the diagnosis of normal pregnancy, is lacking in ectopic pregnancy, and the organ retains its pear-like shape. Menstruation usually is only absent for one and a half to two months, when hemorrhages either of an intermittent or irregular character appear; they may also be constant. These, however, have no connection with menstruation, but are due to the hyperæmia and the formation of decidua in the uterine cavity. The ovaries are as a rule enlarged, hyperæmic and not infrequently present a corpus luteum cyst of unusual size. Sometimes ripe follicles degenerate into large cysts. The unaffected tube is also hyperæmic, and not infrequently by inflammatory changes becomes atresic, and is transformed into a hydrosalpinx. In cases where a diagnosis is difficult he advises curretting the uterine cavity, in the hope of getting shreds of decidua for the purpose of a diagnosis. In case that the fœtus had died a crackling sensation in the tumor is characteristic.—*Wiener Medizinische Presse, No. 44, 1896.*

The Early Diagnosis of Intestinal Perforation.—Dr. Gluzinski, of Cracow, Poland, claims that one may diagnose a perforation of the intestines before peritonitis has appeared. On auscultating the abdomen, if perforation has occurred, one will hear distinctly the heart sounds and the vesicular pulmonary murmur. This, he holds, is due to the presence of gas in the abdominal cavity. But a still more important sign is the alteration of the pulse. At the beginning of the perforation it becomes accelerated, which, after a few hours gives way to a slowness.—*La Semaine Médicale, No. 55, 1895.*

Some Little Known Forms of Masked Malaria.—Dr. T. A. Zacharian, a military physician at Batum, Russia, has observed a few peculiar manifestations of masked malaria among the soldiers in the garrison in that place. A number of them began to suffer from violent attacks of palpitation of the heart, others from a recurrent tonsillitis, which would appear daily and soon disappear in a few hours in spite of the considerable size of the tonsils. Still others would be affected with acute coryza, accompanied with symptoms of angina pectoris. The malarial origin of these symptoms was placed beyond doubt by the discovery of the plasmodia of malaria in the blood of the patients. All were rapidly cured by the administration of quinine, either by the stomach or hypodermically.—*Ibidem.*

The Diagnosis of Cerebral Abscesses of Otitic Origin.—Drs. K. Schwartz and L. Treitel, though admitting the extreme difficulty of diagnosing these abscesses, would place most dependence upon headache, which need not be unilateral and on the side occupied by the abscess, except in abscess of the cerebellum where the pain is nearly constantly localized in the back of the neck; vertigo, loss of memory, somnolence, irregular and slow pulse, constipation, optic neuritis and absence of fever. In very slowly progressing abscesses there may be noticed occasionally a slight rise in temperature of an atypical character, and especially in the evening. Sensitiveness of the cranium to percussion is a very uncertain symptom. Yet all these mentioned symptoms may be present and no abscess be found; on the contrary, they may all be absent and the necropsy reveal an otitic abscess.—*Hospital Stideude, No. 43, 1895.*

The Diagnosis of Diabetic Coma.—Dr. F. Hirshfeld, of Berlin, thinks that a typical case is easily recognized. A diabetic who has been feeling quite well notices gastric symptoms; a violent headache sets in and a sensation of dyspnœa. These symptoms gradually increase in severity, the respirations become deeper and more rapid, the sensorium become confused, the patient slowly loses consciousness, and in two to ten days after the appearance of the first symptoms death occurs.

Abortive forms frequently are noticed, where one or more symptoms are pronounced, so that a suspicion of grave coma is aroused, but the symptoms disappear in a few days. The excretion of acetone is also increased here.

A close similarity is offered by poisoning by salicylic acid in diabetics, yet here the symptoms will only last a few hours.

Again, the attacks of heart weakness which are observed in diabetics after severe exertions, may be easily confounded with diabetic coma. However, examination of the urine for acetic, diacetic, and oxybutyric acids will be a certain guide as to the condition. This diagnosis is important, as these conditions of exhaustion are more easily treated than the terminal stage of diabetic coma.

A much more difficult task is to decide whether apoplexy has complicated diabetes. For example, he has observed a diabetic where an apoplectic state with an isolated paralysis was present. The patient had previously had several apoplectic seizures, with isolated paralysis, and examination of the urine revealed neither acetone nor diacetic acid.

Sometimes the abdominal symptoms, obstinate constipation, and vomiting may be so prominently in the foreground that an obstruction of the bowels may be simulated. In all suspicious cases one should examine the urine. A sudden sinking of the blood pressure may precede even ten days before death.—*Deutsche Medicinische Wochenschrift, No. 26, 1895.*

Diagnosis of Retro-Peritoneal Lipomata.—Drs. C. D. Josephson and A. Vestberg, in an article on retro-peritoneal lipomata, discuss the diagnosis of these tumors. Mesenteric cysts, sarcoma and carcinoma must be excluded before a lipoma can be diagnosed. Mesenteric cysts rarely attain the size of a lipoma, have a certain degree of elasticity of consistence, present the wave of fluctuation, as they generally are unilocular. The larger the cyst, the more pronounced the signs. If the contents be of a hemorrhagic nature a history of external traumatism will possibly be elicited. They occasionally give rise to severe pain, which lipomata never cause. An echinococcus cyst is most difficult to differentiate from a lipoma. Such a cyst is of slow growth, of a hard consistence, without fluctuation, and presents the characteristic fremitus.

Sarcomata and carcinomata present malignant characters. They are of rapid growth, though this may also be observed in a certain stage of lipoma; ascites frequently is observed early, and metastases are absolutely decisive in the diagnosis of a malignant growth. Retro-peritoneal malignant growths are frequently secondary to other primary foci of malignity, especially in the testicle or possibly in the intestine.

Tuberculosis of the mesenteric glands, and especially in children, may cause irregular and quite large neoplasms, though they are never of the size of a lipoma. A peritoneal tuberculosis with its shifting symptoms might, on a superficial examination, simulate a lipoma. A lipoma may closely resemble a sarcoma, for it is prone to grow rapidly, and by pressure upon the mesentery it so interferes with nutrition that the total impression of the marasmatic patient is such that one may doubt whether it be not of a malignant nature.

Tumors of the kidney may be distinguished by their not attaining such a size, their connection with the one kidney may be demonstrated, and examination of the urine will give one many serviceable points; for example, the bloody urine of a carcinoma, pus in pyonephritis, intermittent or permanent retention in hydronephrosis, and the cystic character will distinguish it from a lipoma. Fluctuation may be observed in large and myxomatous lipomata, but no distinct wave, as in unilocular cysts. A differential diagnosis between a tumor originating in the renal capsule is impossible—indeed, some of the largest lipomata originate in the fat around the kidney.

As the majority of retro-peritoneal lipomata are seen in females, they should be differentiated from uterine and ovarian tumors. A tumor of the uterus nearly always has a harder consistence than a lipoma. An ovarian tumor is more difficult to distinguish on account of the number of varieties. If one can palpate two normal ovaries, such a growth may be excluded. Omental tumors may also give one difficulty. In case of doubt a trial puncture may be of service, for a cystic tumor will always yield fluid, a solid one, blood, while a lipoma will yield nothing; yet this measure is by no means devoid of danger.

A pelvic tumor without associated signs of malignancy and which has reached a considerable size, which seems to lie behind the peritoneum, which completely displaces the large intestine from the iliac fossa (flatness on percussion), and which nearly or fully gives one the impression of fluctuation, is a retro-peritoneal lipoma. If the tumor may be felt immediately under the abdominal wall in the lumbar region, and if it spring back after being drawn forwards, it is certainly retro-peritoneal. If it be felt to consist of large lobes which offer a striking sensation of unequal resistance, and any portion of it be calcified it is certainly a retro-peritoneal lipoma. A trial puncture in such cases is of little value; a trial incision decidedly indicated.—*Hygeia, No. 10, 1895.*

Typhoid Fever in Cities.—Dr. John Aulde *(Alkaloidal Clinic)* gives an interesting article on this subject in which he says: We must give Nature credit for a certain degree of conservativeness, else everybody would be affected by disease. It follows, therefore, that the person thus exposed may or may not become the subject of disease, everything depending upon the special condition of the cells susceptible to the invasion; and this again, as a rule, must be dependent upon the general condition of the system. It is assumed, therefore, that any person with a normal condition of the body, which includes a healthy condition of the alimentary tract, will not be attacked by typhoid fever; but this assumption does not carry with it the impression that under continued exposure the resistance will be maintained indefinitely. Indeed, there may be temporary conditions in which resistance is absent, brought about by indiscretions in diet, a debilitated condition of the system from fright, exhaustion, prolonged loss of sleep, and other like causes, all of which must be taken into consideration.

One of the overlooked pre-disposing causes of typhoid fever then, we must conclude, is the temporary absence of normal resistance, as outlined above, and this in turn depends upon the nervous system. And, although it is quite true that persons with "nerve" do not so readily suffer from typhoid fever, no claim is set up that the disease is of nervous origin. The writer has witnessed so many evidences in confirmation of this view while engaged in private practice, that he has almost come to regard it as an axiom that those with good general health and plenty of nerve will escape, while those lacking in the latter essential will most surely succumb on the least exposure, be it drinking water or direct infection from a case. Not only physicians, but the general public, realize how important it is to avoid excitement in the case of sickness, and especially epidemics, but no one of a statistical turn of mind has undertaken to elaborate the theory and give it a practical demonstration.

While on this topic, it will be profitable to introduce a suggestion relating to prophylaxis, since it is even of greater importance that we should be able to prevent the disease than that we should possess the means of arresting or aborting it when once established. The first thing in order, and very naturally, too, should be directed towards the nervous system; but the condition of the digestive tract is of scarcely less importance. These two factors are so interdependent and closely related that their relative merits and joint influence cannot be well elaborated in a few short paragraphs. At least those not familiar with the most recent observations relative to the independent activities of cells, together with the knowledge which we now possess in respect to the special functions of cells, individually and collectively, will scarcely be able to comprehend the complexity of the situation. For example, the peptic cells perform their functions independent of their nerve supply; so do the secreting cells of the small intestine, and of the kidneys; and probably the same is true of the various groups of cerebral cells, the connection with the general nervous system being for the purpose of making a complete organism.

Apparently, then, the human organism is a very complicated affair, as, although the various cells perform their functions independently, a general derangement of the nervous system results in arresting their function, a condition generally referred to as a "functional" derangement. It is evident, therefore, that the most effective means of promoting prophylaxis must be through the nervous system.

But what is "functional" derangement? Is it anything which can in any instance be described more definitely? Yes, indeed! We have come to understand pretty well what constitutes functional derangement of the stomach and small intestine, but when we come to interrogate the cerebral functions, our scientific horizon is far too limited. Many persons, however, suffer from chronic functional derangement—in sight—due to faulty elimination of waste products, and this is notably true of those who are attacked with typhoid fever. As a general rule, those who recover without untoward event in the course of the disease enjoy better health than for years before, simply because the disease and the remedies administered, together with the effect of the poison upon the cellular structures of the body, have so stimulated cellular activity that sub-oxidation does not occur. The same is true of patients suffering from abscess, boils, carbuncle, and in cases of surgical operations. The old practice of bleeding furnishes an excellent illustration of this principle. Nearly all patients subjected to the bleeding process quickly acquire strength and increased weight—owing to the leucocytosis attending or following the operation.

It is not so much that the poisoned blood is withdrawn as because the leucocyte finds a stimulus for its proper work, namely, that of distributing the antiseptic provided by Nature. Instead of bleeding, however, modern medicine provides a more acceptable remedy against sub-oxidation, a remedy which possesses the property of stimulating the activity of the leucocyte. There is abundant evidence to show that the normal product of the leucocyte partakes of the nature of a ferment, and when, through "functional" derangement, this cellular activity is dormant, it may be rekindled by supplying it artificially. Of course, I refer here to nuclein obtained from animal sources, a remedy which has been shown to produce leucocytosis, and one that I have used repeatedly, either alone or in conjunction with other appropriate remedies, for the prevention of attacks of illness simulating typhoid fever, as well as arresting or aborting the disease when once established.

Antitoxin Treatment as a Cure of Diphtheria.—Dr. Elmer Lee, of Chicago, has presented to the American Medical Association an article on "The Fallacy of Antitoxin Treatment as a Cure of Diphtheria," in which he says:

The claims that are seductively held out that cases treated early by antitoxin would recover have utterly failed. The claim subsequently that cases treated by antitoxin recover more quickly than those not so treated has utterly failed to be true. The claim that the death rate would be lessened has proved to be a disappointment. The claim that antitoxin was harmless has been proven to the contrary by many fatal terminations. Judging from the facts concerning the use of antitoxin in practice, does there stand on record to-day one single valid reason, from a clinical standpoint, to encourage the hope of better results in the future than have been attained in the past by other methods of treatment? It is not the purpose to impute insincerity, or lack of intelligent industry on the part of the profession concerned in experimenting with antitoxin, but the promises of better results through its use have unfortunately failed to be substantiated.

The human system, when laboring under morbid influences, needs rather those elements which can add strength and vigor to the vital resistance. By what law or principle in physiology can augmented vital resistance be maintained by the introduction of antitoxin into the system? Has the explanation of the action of antitoxin been satisfactorily given by those who are its sponsors? It is to be conceded that there are cases of diphtheria which, when treated by antitoxin, have seemingly progressed favorably, while there are other cases which have quickly terminated fatally. The influence of the antitoxin virus is directly dependent upon the condition of the patient at the time of its introduction. If the powers are well maintained, as during the first few days of the disease, naturally the system is stronger and its efforts more effective toward elimination, both of the antitoxin introduced and of the autogenerated toxin. Here is the explanation of the advantage claimed by the early use of antitoxin. It follows, when the system is further impaired its phagocytic action is also impaired, and the chances for recovery by reason of the further introduction of extraneous matter are lessened. What physiologic problem could be more simple? The point is this, that the blood does not need to be further polluted in order to expel the autogenerated products which it already contains. Can any one explain the reaction which takes place in the human living organism when antitoxin is added? There is a reaction, but that the reaction is a curative influence is open to discussion.

A small amount of morbid matter adjacent to living cell structures is dissolved away by the leucocytes and forced out of the body through the escapes provided by Nature. This takes place regularly when the cell is aided by forces which contribute to its vigor. If the vitality is diminished by extensive morbid processes, extraneous matter added to the system only further weakens the reconstructive agencies which are at work. The theory that sepsis of any kind, already in the system, is able to be neutralized by the addition of manufactured toxins from without, though freely taught, is utterly inconsistent and unreasonable. Can the chemic reactions of the laboratory be successfully repeated in the laboratory of the human body?

Has horse serum, plus disease, any natural place in the human blood? And the red corpuscles are dissolved by its presence. No material success has ever been achieved by the transfusion of healthy animal blood into the human body for the cure of disease. Transfusion of salt water accomplishes all that is claimed for the process. Now, then, how much the less is likely to be accomplished when an infected animal serum is injected for the cure of diphtheria?

The blood has lost some of its component elementary conditions. It is thereby altered in character, and when acting through inflamed mucous membranes morbid symptoms are produced, such as are seen in diphtheria. The fluid which patrols the entire body should be strengthened rather than further decomposed and disorganized by the addition of extraneous and poisonous matter.

The records of the cases treated in the Willard Parker Hospital, of New York City, prove that antitoxin is dangerous and even fatal. The statistics of that hospital establish that the further use of antitoxin is unjustifiable. Extreme interest and effort to know the truth has guided the staff of the Willard Parker Hospital. Dr. Joseph E. Winters, of New York, has sought diligently to establish the value of antitoxin, but the clinical experiences have forced him unwillingly to condemn its use. Is it safe to neglect the warning of such an experienced clinician and medical teacher? Prof. Lennox Brown, of London, patiently and earnestly sought for clinical reasons to further the interests of antitoxin. His conclusions are emphatic and pronounced against it. Dr. Welsh, of Philadelphia, also deprecates the use of antitoxin, basing the conclusions upon an extensive experience in the Municipal Hospital of that city.

Health Department statistics of New York are cited in Chicago to the advantage of antitoxin, and Chicago statistics are published in the interest of antitoxin in New York. Health Department methods of collecting information must be taken with allowance for accuracy. Previous to leaving Chicago a culture was made of the tongue of the office boy and the tube left at the city health office. The answer received stated that the case was one of true diphtheria. In fact, the boy was not ill at all. Provisions were immediately made by the department to fumigate and otherwise annoy the family at the boy's home. Is it not easy to be seen that the enthusiasm and overzealous interest of the medical corps in the employ of cities may bring to the notice of the health departments cases similar to the one cited? Such reports go on the records and contribute toward the statistics which are sent broadcast. The statistics very quickly become confused and their power for usefulness is absolutely *nil.* Unquestionably large numbers of cases which have been reported to be diphtheria and cured by an injection of antitoxin have been of the bacteriologic class.

The Surgical Treatment of Retro-Deviations of the Uterus.—Dr. Augustin H. Goelet, of New York, in a paper read before the New York State Medical Society (Albany, Jan. 28, '96), declares that displacements of the uterus are not accorded the consideration they deserve, and that the routine plan of inserting a pessary and dismissing the case from further attention is an error too often committed. He thinks the majority of cases, especially those of long standing, where structural changes have taken place in the walls of the organ, require surgical intervention for their cure. The pessary alone is never sufficient, except, perhaps, in very recent cases. The concomitant metritis and endometritis must be overcome before a radical cure can be effected.

After discussing the merits of Alexander's operation and the intraperitoneal methods of shortening the round ligaments and vaginal fixation, he described an operation for retroflection which he had employed with success for the past twelve years.

The Alexander operation, which is only applicable in movable retro-deviations, he thinks unnecessary. Its chief disadvantage is the time it requires and the prolonged convalescence it entails.

Intraperitoneal shortening of the round ligaments requires more time for its execution, and the convalescence is longer than suspensio-uteri, and the results have not been so good.

Vaginal fixation is objectionable because it substitutes a fixed anteflexion for a movable posterior displacement. The recent unfavorable reports of complications during labor following it offer another very serious objection to this operation. The best evidence of its inefficiency is that its originator, Mackinrodt, has abandoned it.

Where the uterus is fixed by firm adhesions the author advocates opening the abdomen by means of a small incision, breaking them up and suspending the uterus by its posterior face from the anterior abdominal wall. This does not fix the organ as when ventro-fixation is done. In time the uterus recedes from the abdominal wall, close to which it is at first suspended, and swings in an easy position of nearly normal anteflexion. This he prefers to ventro-fixation because the uterus occupies a nearly normal position, and is fairly movable. Its execution consumes less time than intra peritoneal shortening of the round ligaments. The results have been very gratifying.

When the adhesions are not very firm or extensive they are broken up by manipulations under anæsthesia without opening the peritoneal cavity, and the case is then treated in the same manner as when the organ is movable.

The method of procedure which he advocates in place of Alexander's operation in movable retro-deviations has this to recommend it, viz., that it aims at a cure of the co-existing metritis and endometritis, the maintaining cause of the displacement, and requires but a week's confinement in bed.

For retro-version he dilates the canal, curettes and packs the cavity with iodoform gauze. The vagina is then tamponned with the same gauze in such manner as to throw the uterus into a position of ante-version. This dressing is removed every day, the cavity is washed out with a 1 per cent. solution of lysol, and it is re-applied. This is done for a week, during which time the patient is confined. Then a vaginal pessary is fixed to hold the uterus in a correct position. The cavity is irrigated twice a week, until a healthy endometrium is reproduced.

For retro-flexion the same procedure is adopted, but instead of packing the uterus with gauze, a straight glass drainage stem is used, which serves the purpose of a splint and keeps the uterus straight. It is then maintained in a position of ante-version by means of vaginal tampons of iodoform gauze. The gauze tampon and stem are removed every day, the cavity is irrigated to remove retained clots and debris, and after cleansing the stem is re-inserted. At the end of a week the stem is removed, a vaginal pessary is inserted and the patient is permitted to get up.

The success which he has obtained with this method leads him to believe that the other more complicated and hazardous operations designed for movable retro-deviations are unnecessary.

Senile Endometritis and Vaginitis.—Dr. Augustin H. Goelet presented a paper on this subject at the October meeting of the New York Medico-Surgical Society (*Medical Record*). He thinks if the general practitioner will consider that women past the menopause may be liable to chronic inflammation of the endometrium, and will look for symptoms denoting it, he will find that it is by no means infrequent, and that many obscure troubles in women at this age will be cleared and their suffering relieved.

The atrophic changes which occur at this time, and which are due to a diminished pelvic circulation and impaired local nutrition, are directly responsible for this condition. He agrees with Skene that this process in many cases is a degeneration rather than an inflammation. During the first year or two after the menopause, however, it undoubtedly exists as a chronic inflammation, but contraction and narrowing of the canal of the cervix causes retention of the secretion, which becomes acrid and destroys the mucous membrane.

The general malnutrition which accompanies this condition is regarded more as a result than a cause of the disease, and disappears upon the establishment of drainage and improvement of the local condition. The disease is characterized by a purulent or muco-purulent discharge, which is at times very acrid and irritates the vagina and vulva. The rugæ are effaced and the surface of the vagina is smooth and glistening in places, with here and there minute ecchymosed papillæ.

The same method of treatment which would be applicable for endometritis in younger women would not be suitable in this condition. It is true that drainage and absolute cleanliness of the uterine cavity are essential, but this cannot be accomplished by dilatation in the usual manner with curettage. The mucous membrane in advanced cases is already destroyed, and the closure of the canal of the cervix from bands of cicatricial tissue would make ordinary dilatation dangerous, since rupture would result. The author points out that this may be accomplished safely by means of conical electrodes employed with the negative pole of the galvanic current, and cautions that only a moderate strength should be employed and cauterization should be avoided.

When dilatation has been thus accomplished, a special small double current irrigator is inserted and the cavity is washed out with a weak solution of lysol. This irrigation can be utilized as an electrode and the current turned on while the irrigation is going on, thus producing a moderate stimulation of the endometrium. The surface of the vagina and vulva is then dusted with a bland non-irritating powder, markasol, and a solution of the same is used as a vaginal douche once or twice a day as required.

For vesical tenesus the urethra is dilated with the same electrode, and the bladder is washed out with a 1 per cent. solution of markasol. The same solution is used for the rectum.

Cicatricial contraction of the vagina in advanced cases may prevent the use of a pessary to correct a misplacement, if this complicates the case. In these cases as well as where the organ is prolapsed, the author would prefer ventral suspension to hysterectomy.

Senile endometritis is usually regarded as most intractable and is trying for both physician and patient. Yet the author says he knows of no gynæcological disorder the treatment of which is undertaken with more certainty of success.

The Operative Treatment of Hernia.—W. S. Halsted, M.D. (*Am. Jour. of the Med. Sciences,* July, 1895): In the treatment of hernia, the problem is to close a rent in the abdominal wall, and to provide for the safe transmission of the spermatic cord. The cord is the first cause of the hernia, and the ultimate obstacle to its cure. A reduction in the size of the cord would lessen the liability of the hernia to recur, and the cord may be reduced to less than one-third its original size by excising the superfluous veins. In closing the abdominal wall, the muscle is sutured by deeply placed mattress sutures of silver wire, and the cord is brought forward between the last two stitches, and is made to lie superficial to the aponeurosis of the external oblique muscle, which embraces that structure snugly by two very fine stitches. The skin incision is closed by an interrupted suture of silver wire, and the wound is covered by silver foil. Silver is used on account of its inhibiting influence on the growth of micro-organisms.

Cardiac Murmurs.—Prof. Potain, in an article on inorganic heart murmurs (*Hospitals Tidende,* November 30, 1894), sets forth the following conclusions:

1. A continuous cardiac murmur of unaltered force is probably organic, and is to be regarded as such unless proved to be the contrary.
2. A murmur which appears and disappears, without any discoverable cause, or from an unimportant cause, is to be held inorganic, if tricuspid insufficiency or mitral stensosis be absent, for this may occur in these two diseases.
3. All murmurs that disappear completely, or are decieedly modified by a change in the patient's position, are inorganic.

Indicanuria as a Symptom of Latent Suppuration.—Indican in small quantities is a normal constituent of healthy urine, but under certain circumstances the amount is so large as to merit the designation of indicanuria. This condition is usually dependent on decomposition of the intestinal contents consequent on constipation, but it has recently been discovered in the urine in connection with the formation of pus, in such quantities as to authorize the belief that its presence may afford an important indication of latent suppuration. The first thing, of course, is to eliminate the intestinal tract as the source of the indicanuria, and this is done by the administration of naphthol, bismuth or other disinfectant. Should chemical analysis still reveal the persistence of the indicanuria, there is reason to suspect suppuration. The analysis is simple enough to admit of its application by every one. Equal quantities of urine and strong hydrochloric acid are shaken together in a test tube, and a little chloroform is added. In the presence of indican this becomes blue from the indigo liberated by the decomposition of the indican, and falls to the bottom of the tube. A fair idea can thus be readily obtained of the amount of indican present, but for diagnostic purposes it is necessary to resort to a quantitative analysis. This does not involve much additional trouble, advantage being taken of the bleaching powers of hyperchlorite of calcium, a standardized solution of this salt being dropped into the above mixture until complete decoloration results. Three or four drops of a 5 per cent. solution may suffice for this purpose, but in some cases as much as 50, or even 80, drops may be required.

Oxalic Acid as a Germicide.—A series of experiments by Dr. Mary Sherwood (*Johns Hopkins Hospital Reports*) to test the relative germicidal powers of oxalic acid and potassium permanganate, seems to indicate that the solution of oxalic acid was the real germicide. Using bits of surgeon's silk, dipped in cultures of *staphylococcus pyrogenes,* it was found that potassium permanganate, in saturated solutions, did not sterilize them, either at the room temperature or at a temperature of 45° C., by exposure of from one to ten minutes. On the other hand, oxalic acid in saturated solution, at a temperature of 40° to 45° C., sterilized the infected threads exposed to its action for one minute, showing the oxalic acid to be the more powerful germicide.

The Need of a Universal Language.—Says the editor of the *North American Practitioner*: "If international assemblages are to become of common occurrence, a common necessity must soon create a common language. It is idle to suppose that men will cross the seas and traverse continents simply to endure the jargon of a series of unknown tongues, and only to be acquainted with the thoughts of the speaker as months afterwards the volume of transactions shall bring to him an authorized translation. It transpires that the Government of Spain has authorized the use of *six* different languages, in either of which papers may be presented at the meeting of the Ninth International Medical Congress of Hygiene and Demography, to be held in Madrid in 1897. Think of the herculean task of bringing out the proceedings of such a congress in *six* distinct languages, not to speak of the cost of such a publication or the expenses of its transportation! Now, let the Greeks and the Latins champion their claims for adoption; but, sooner than suffer as now, we must let the acquirement of some one common language become in all lands a prerequisite to medical graduation."

We say amen to this last clause; but does the editor just quoted, or any other reasonable man, seriously believe that medical students in general will ever learn Latin or Greek thoroughly enough to talk and write in it? They cannot spare the time. There is but *one* language whose acquirement, as "a prerequisite to graduation," would be both comparatively easy and of daily practical advantage to physicians the world over, and that is—English! Why not agitate for its immediate adoption? It will be universal, anyhow, within another hundred years.

Mental Power from Manual Training.—Dr. C. H. Henderson reasons as follows in a recent number of the *Popular Science Monthly*: "Intellectual power is the result of a developed brain organism. This development comes through use. Any activity at the circumference means a corresponding activity at the center. The exercise of any one of the senses means the development of its corresponding brain center. The sum of this development is intelligence. This is what I mean by the psychological import of manual training. This it is which makes the lovers of power value manual training. Each movement of a motor nerve, whether it be in the fashioning of wood or metal or clay, involves a corresponding brain movement. These movements stimulate growth, and growth is what we are after. Intellect is a function of brain nerve.

"I believe, then, that the very strongest argument for manual training is not the practical value of the skill which it develops, not even the moral significance of the sturdiness which it inculcates; but that it is something which includes these and the other ends of culture; that it is the increased intellectual power which is the necessary physiological result of such training. This is a large claim, and one that has never been urged before, I believe, on precisely these grounds. But it is a claim which can be fully substantiated."

Practical Use of Oxygen-Ether Anæsthesia.—Cole (*Med. Rec.*) states that the amount of oxygen gas used on such occasions averages about one gallon per minute. In addition to eleven cases of his own, he reports ten cases of Dr. Markoe's, making a total of twenty-one. The majority of cases upon whom it has been used have shown: First: An absence of the so-called stage of excitement. Second: No cyanosis or respiratory disturbances during anæsthesia. Third: A tendency to regain consciousness more quickly when etherization is discontinued than after the usual methods. Fourth: No nausea or vomiting subsequent to etherization. Fifth: The amount of ether consumed to be considerably less than formerly.

The intense thirst so often present after etherization has been greatly moderated in nearly every instance.

EARLY SIGNS OF LOCOMOTOR ATAXIA.

According to Professor Fournier, the first symptoms of locomotor ataxy may be classed as follows: 1. Sign of Westphal. 2. Sign of Romberg. 3. The "stairs" sign. 5. Crossing of the legs. 5. Walking at the word of command. 6. Standing on one leg.

1. Westphal's sign is well known. It consists in the abolition of the patellar tendon reflex, and is present in two-thirds of the cases.

2. Romberg's sign can be thus appreciated: The eye is an indirect regulator of motion. It helps to correct deviations in walking and maintains the equilibrium. When a patient is suspected of incipient ataxy, it will often suffice to make him close his eyes when in the erect position to verify the diagnosis. In a few instances his body will oscillate, and if the malady is somewhat advanced he will be in danger of falling.

3. The "stairs" symptom. One of the first and most constant symptoms of incipient locomotor ataxy is the difficulty with which the patient will descend stairs. If questioned closely on the subject, he will say that at the very outset of his malady he was always afraid of falling when coming down-stairs.

4. The manner in which a patient crosses his legs is often significant. In the normal state, a man when performing that act lifts one leg simply to the height necessary to pass it over the other, whereas in the affection under consideration he lifts it much higher than necessary, describing a large segment of a circle.

5. Walking at the word of command. The patient seated is told to get up and walk instantly. After rising he will hesitate, as if he wanted to find his equilibrium before starting off. If while in motion he is told to stop short, his body, obeying the impulsion, inclines forward as if about to salute, or, on the contrary, jerks himself backward in order to resist the impulsion forward.

6. The patient is asked to stand on one leg, at first with his eyes open, afterward closed. Although man is not made for this position, yet he can balance himself pretty firmly for a little while. The ataxic will experience a great deal of difficulty, and will instinctively call to his aid his other foot, so as not to fall. If his eyes are closed he will not be able to stand one instant, and if not held would fall heavily to the ground.

Such are the symptoms of incipient locomotor ataxy. They will not be all present frequently, but they should be all sought for in order to avoid an error which might have grave consequences.—*The Practitioner.*

A French writer recommends in ingrowing toe nail, the painting of it with a warmed 40 per cent. solution of caustic potash. In a few seconds the nail becomes so soft that it can be scraped away, except a small layer, which can be removed by a small scissors.

OBITUARY.

THE death of DR. HENRY A. MOTT, M.D., Ph.D., LL.D., removes from the ranks of science one of its most active and practical workers. Dr. Mott was a chemist of rare ability. For three years he was employed by the United States Government as examiner of food of the Indian Department, and was frequently called as an expert by the city in cases of poisoning, especially in murder trials, where the ablest chemical and microscopical knowledge was required. Among his well-known works were "The Air We Breathe"; "Ventilation"; "Was Man Created?" "The Chemist's Manual"; "Matter, Ether and Energy," etc.

DR. FRANCIS H. RANKIN, a leading physician of Newport, died at his residence, November 10th, at the age of fifty-one years. Dr. Rankin was the son of the Hon. Robert G. Rankin, at the time of his death the Senior Regent of the New York State University. On the breaking out of the Franco-Prussian War, Dr. Rankin, with his classmate in the New York University, Dr. William N. Guernsey, was pursuing his studies in Vienna. Both applied for and received appointments in the Prussian service as assistant surgeons. Dr. Rankin continued in the service till the close of the war, but Dr. Guernsey was prevented from entering on his work by sickness.

THE death of SIR BENJAMIN WARD RICHARDSON, M.D., November 21st, of apoplexy, at the age of sixty-eight years, closes the earthly career of a life which has for many years been full of practical work, not only in his own profession, but in the general walks of science.

In 1865 he began a series of experiments on the nature of poisons and the spread of contagious diseases, which led to his discovery of a special poisonous product, which he called septine. In the next year he discovered the use of ether spray for the abolition of pain in surgical operations. He also introduced methylene bichloride as a general anæsthetic, and found the controlling influence of nitrate of amyl over tetanus and other spasmodic affections.

He edited the *Journal of Public Health* and the *Social Science Review* for some years. His contributions to these publications related chiefly to the advancement of the practice of medicine by the experimental method, the study of disease by synthesis, the restoration of life after various forms of apparent death, the maintenance of life in various atmospheric conditions, the effects of electricity on animal life, and various methods of killing animals without pain, which led to his invention of the lethal chamber now in general use. He was the author of many papers on new medicines and new methods of treating disease, and on the effects of alcohol on the human body.

During late years he devoted himself to the study of the diseases common to modern civilization. His last work was upon national health.

It is said chronic leucorrhœa yields more readily to Donovan's solution than any other remedy, the arsenic acting as a local and general tonic.

The great objection to that most valuable drug, cod liver oil, is the disagreeable taste and odor.

A favorite method for prescribing this remedy in Dr. Taylor's clinic (*Phila. Polyclinic*) is the combination which follows:

Cod liver oil....................	6 fluid ounces.
Glycerine...........	½ fluid ounce.

Yolk of 1 egg.
Whisky or Jamaica rum sufficient to make 8 fluid ounces.
Mix.
Give one teaspoonful four times a day, and increase the dose *ad lib.*

Another method, but less applicable to dispensary practice, because of its expense, is to dispense the oil in 15 or 30 minim gelatine capsules. Give one or two three or four times a day.

MISCELLANY.

—It is propsed to establish a national lazaretto for the treatment of leprosy.

—The *British Journal of Dermatology* gives a case of lupus of the face, cured by thyroid, one to four tablets a day.

—The insane are said to number over 13,000 in the City of London, with an annual increase of over 600 each year.

—Mathews holds that, practically speaking, all well-marked cases of rectal ulceration are due to syphilis, tuberculosis or malignancy.

—Prof. Poulton, of the British Association of Science, reasoning from scientific data, claims that the earth is over 100,000,000 million years old.

—The extreme limits of bacterial life have never been discovered, but it is known that it has a range of at least 270°, from far below zero to 180° above

—In the sixteenth century the average age of physicians was thirty-six years and five months; in the nineteenth century, fifty-six years and seven months.

—Charcoal made from rice has for some years been much in use in Japan as a surgical dressing, and appears to possess several important advantages over gauze.

—Virchow says "that all the peoples that have not been reached by vaccination or have not accepted it have disappeared from the face of the earth, destroyed by smallpox."

—Prof. Robinson, of Bowdoin College, has devised an apparatus for burning wood alcohol for purposes of disinfection Formaldehyd is one of our most powerful disinfectants.

—The engagement of Dr. Jean Charcot, son of the late Prof. Charcot and *Chef de Clinique* at the Salpêtriére, to Jeanne Hugo, granddaughter of the poet, Victor Hugo, has been announced.

—The Board of Health of this city proposes to co-operate with physicians in experiments which will assist in early diagnosis of typhoid fever. Circulars may be obtained covering the information.

—A suggestion for the removal of a fish bone from the throat is to drink a pint of milk, following in half an hour with a sulph. zinc emetic. The coagulated milk, as it comes up, brings the fish bone along with it.

—The death rate from typhoid fever in ten European cities known to have a pure water supply, is 6 per cent. on 100,000, and in this country in the same number of cities known to have polluted water supplies, the rate is 56.9!

—The Manhattan State Insane Hospital, Ward's Island, finds it necessary to erect a new building, which will contain 150 beds. An addition is also to be made to the Central Hospital, at Islip, L. I., of a building which will hold a hundred patients.

—The Hull gift of $1,000,000 to the Chicago University Biological Laboratory, has been increased by the addition of $500,000 worth of property to be situated at Peoria. Chicago will have the best equipped biological laboratory and the finest telescope in the world.

—At last this State has a food inspector, whose duty it will be to examine all food products, such as butter, milk, cheese, vinegar, etc. The lactometer has been found inadequate for the test of milk, and hereafter the Babcock test will be employed. Dealers who use antiseptics in their articles will be detected and punished. This is an important and practical undertaking, and one that the public has a right to demand.

—At the recent International Congress Against the Use of Alcohol, held in Basel, a report was presented proving that France at the actual moment consumed more alcohol than any other country in Europe. The amount consumed is increasing in France and Belgium, and in the other countries either diminishing or stationary.

—Dr. William I. Robinson quotes in the *New York Medical Journal*, November 14th, the treatment in a very severe case of *lymphango phlebitis* with a 25 per cent. solution of icthyol in glycerine, applied externally with absorbent cotton and covered with oiled silk, with very speedy and most satisfactory results. The applications were repeated three times a day.

—Krafft-Ebing, of the University of Vienna, enlivened his instruction lately by allowing a madman, one of his patients, to lecture on mental diseases in his stead. The man is afflicted by periodic attacks of mania, during which he is much more clever and witty than when sane. His lecture, on "The Mental Condition of the Maniac in Periodical Attacks of Madness," was a brilliant success. After it was over he was shut up again.

—The most practical remedy, according to *Hospital*, for July depression is a suitable nerve tonic; and perhaps the best and most easily obtainable of all nerve tonics for summer weather is the sluicing of the head and spine with cold water every day, or even twice a day. If any man who is disposed to commit suicide will give himself a preliminary shower bath, it is highly probable that he will change his mind before the toweling is finished.

—Probably the most protracted case of typhoid fever on record is that reported in *Medicine* for January, 1896. The case was taken from the practice of Dr. Falkner, of Dublin, Ireland, and extended over a period of 290 days. After hearing all the discussion in the matter, the Society decided that it was a case of genuine typhoid fever, with perhaps some undiscovered complications. Recovery resulted. At the same meeting another case was reported which lasted 119 days.

—There is a strong movement on foot at several important points, looking to the "abuse of medical charity" and "to investigate the free treatment of the so-called poor in the various hospitals and dispensaries." This is an important subject, and should have careful and thorough investigation by men absolutely free from any connections which would warp their judgments. What is wanted is an honest and fearless investigation of the whole matter. The "Lodge physicians" are also coming in for their share in charity depravity.

—A new method of applying heat in the treatment of rheumatism is being tested. The method consists in the local application of hot air to the parts affected. The apparatus by which this is accomplished consists of a copper cylinder, under which several gas jets are kept burning. Into this cylinder the limb is inserted and the ends are closed. Stop cocks are arranged to let out moisture exuding from the skin, and the temperature is raised from 250 to 260 degrees. Precautions are taken to prevent the limb from coming in contact with the hot metal, and the application is continued for fully forty minutes. The results reported seem to be satisfactory in both acute and chronic cases. In our cases we are careful to give the patient a large quantitity of pure water to drink.

—Joseph Jefferson gave a delightful talk to the boys of a Baltimore medical college recently. At its conclusion his hearers were so enthusiastic that they insisted on drawing his carriage from the college to his hotel. For a moment he was nonplussed at this, but with a characteristic shrug and a graceful smile he settled back and enjoyed the honor. When the hotel was reached the boys gave him a resounding cheer, and, standing up in the carriage, Mr. Jefferson said: "Young gentlemen, I thank you for this demonstration. You must all be stars, for you all have good drawing abilities." Then, before the laughter had subsided, he hurried into the hotel. "Goodness! I am glad to be out of that," he said when he had got into the lobby. "It was well meant, I know, and I enjoyed the spirit of the boys. But it took me so by surprise, and, besides, I did not like to be the feature of such a show."